Powder Diffraction File™

Aliphalbeincellindexces

Unorganic Phases

Seis 1-52

(라이네 타이트) 타이네시 (라이네 라이너라에 (라드네시) (라이네 라이너라에 (라드리니시) (라이네 라이너라에 (라드리시) (라드리니시) (라이네 라이너시 (라이네시) 라이크 라테드 (라이너지) (라이네 목가에서 (totting) 2yall/시하다라 원리라에서 (라이네 목라에너의 (하다라 원리에서) (하다라 (라이너) (라이네 목데네하나에 (라이타라) (하나라 (라이너)

International Centre for Diffraction Data

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Alphabetical Indexes for Experimental Patterns

Inorganic Phases Sets 1-52

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Zeolite and Molecular Sieve Indexes

Reviewed by: Volunteer Editors—Specialty Index

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Zeolite Structure Type Name—Code Cell Angles Crys. Chemical β γ Sys. Formula 3 Strongest Cell Parameters Zeolite Name PDF# QM Reflections Li-A(BW)--ABW 2.52, 8.59, 2.98, 3.09, 6.42, 4,02₄ 3,31₄ 6,08₈ 6,27_x 3,02₆ 90.00 107.46 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 M 90.00 O . 90.00 O 90.00 O 90.00 O 8.23 10.85 7.82 .8.02 8,12 LiAlSiO₄
LiZnAaO₄•H₂O
Li₄Be₄P₄O₁₆•4H₂O
Li₄Be₄As₄O₁₆•4H₂O 48- 631 · 5.03 8.27 48- 517 48- 517 48- 518 48- 518 8.29 9.66 10.04 10.49 5.16 4.74 4.85 4.85 3.21 Li-Zn4P4O18+4H2O 6.58_z 6.38_z 3.11_x 3.81s 4.287 4.696 3.21s 3.10₄ 3.04₇ 3.26₆ 3.04₇ 3.27₇ 90.00 Li₄Zn₄As₄O₁₆•4H₂O LiZnPO₄•H₂O TIAISiO₄ LiGaSiO₄•H₂O 47- 251 8.29 10.82 5.16 90.00 90.00 00000 52-1488 48- 502 44- 51 45- 132 10.03 8.28 10.47 8.30 5.01 5.40 5.03 5.41 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 CCC ad zeolite 8.21 9.42 did ABW 6.46_x ABW (TI) 8.114 Tla. AlSiO4 ABW (TI)

Lis ABW, (Li)

Lis ABW, (Li) LiAlSiO4°2H₂O Li₂Al₂Si₂O₈°2H₂O Li₂Al₂Si₂O₈°0.18H₂O Li₂Al₂Si₂O₈°0.18H₂O Li₄Al₄Si₄O₁₈°4H₂O 6.44_x 3.17_x 6.41_x 3.96_x 3.03_x 3.17₈ 6.41₁ 3.03₈ 2.74₅ 3.17₂ 3.03₅ 3.03₅ 3.17₈ 0 X 0 27-1211 8.18 10.31 5.00 90.00 90.00 90.00 10000 39- 160 39- 215 40- 63 8.18 90.00 5.48₅ 6.42₉ X 8.19 4.99 90.00 90.00 41- 554 10.31 90.00 LiAISiO 47. 27 4.02 3.94 3.17 7.23 10.27 12.05. 90.00 90.00 90.00 0 ACP-1-ACO. 49-824 C 7.02 3.22 3.244 10.24 10.24 9.65 90.00 90.00 90.00 T CaH40Ns*[Alo,88Co7,13PsC32]*4H2O ALPO4-18--AEI 43- 568 45- 117 45- 118 47- 608 95.55 90.00 M 90.01 90.00 M X AIPO4*0.45H2O (AIPO4)6(((CpH6)4N)0.88(OH)) AIPO4 0000 APO-11 ARO-11 ARO-11 M-SAPO-11 M-SAPO-11 AlPO4-11—AEL 41- 556 43- 563 47- 599 48- 104 41- 555 9.24₈ 3.93₆ 5.50₅ 3.83₈ 3.84₇ 4.19₈ 3.83₇ 3.79₆ 3.93₆ 4.02₅ 90.00 Al₂₀P₂₀O₈₀ Al₂PO₄ • 0.24 H₂O 10.9_x 4.23_x 18.48 8.37 90.00 90,00 19.47 R.44 90.00 90.00 90.00 4.06₂ 4.21₂ 4.22₂ AIPO₄
Mn-Ai-Si-P-O-H₂O-(C₃H₇)₂NH₃
Al₁₈Mn₂P₂₉O₈₀(C₆H₁₈N)₂ 13.47 18.71 8.44 90.00 90.00 90.00 10.9₆ 9.02_x 3.95₆ 4.37₆ 3.82₆ C₁₂H₈₀N₃*Al₂₀H₂O₈₀P₁₈Si₂ Al₂₀H₃Si₃P₁₈O₈₀*16H₂O C₆H₁₆N-Al₂O₃-SiO₇-P₂O₈-H₂O C₁₂H₂₉NO-H₂OAl₂O₃-SiO₇-P₂O₈ APO 11 54 0 11 54 0 11 54 0 11 64 0 11 4.21₈ 4.06₄ 3.84₇ 3.92₈ 3.99₈ 41- 23 41- 24 90.00 90.00 9.32_x 5.51_x 18.67 18.06 000 90.00 90.00 90,00 4.28_x 4.24_x 4.17_x Alo.57Sio.04Po.39O2 # (PO 11 TAPSO-11 4.05_x 4.23_x 4.08_x 5.50₆ 3.83₉ 5.51₆ 8.79₆ 8.93₈ 3.80₆ $\begin{array}{l} Als Si_{0.35}P_{1.74}O_{8.08}\\ C_{0.25}P_{1.06}Al_{0.48}N_{0.97}O_{2}P_{8.47}Si_{0.04}Ti_{0.01}*0.07[(C_{2}H_{7})_{2}NH)(Ti_{0.01}\dots\\ Al_{0.48}O_{2}P_{0.47}Si_{0.04}Ti_{0.01} \end{array}$ 47- 614 48- 847 TARSO-11 AIPO4-8-AET Al₂P_{1.94}O_{7.85} -3H₂O Al₃₆P₃₆O₁₄₄ Al-P-O 43- 561 48- 551 47- 245 13.6_x 13.3_g 16.4_x 4.19₈ 16.6₈ 13.6₉ 16.7a 4.13g 4.177 000 X 0 X 14,46 8.26 90.00 90.00 90.00 Afghanite—AFG 90.00 90.00 120.00 H (Na,Ca,K)₂(Si,Al)₁₂O₂₄(SO₄,Cl)₂ 46-1264 3.69, 3.30 4.833 12.60 12.80 21.41 AlPO4-5--AFI 89-216 C 40-71 41-44 i 41-557 C 3.96₇ 3.96₇ 3.97₄ 13.71 13.73 13.71 13.74 13.71 13.73 13.71 13.74 90.00 120.00 H 90.00 120.00 H 90.00 120.00 H 90.00 120.00 H Al₁₂P₁₂O₄₈[(C₅H₇)₄N]OH AlPO₄**H₂O AlPO₄ Al₁₂P₁₂O₄₈(C₅H₇)₄NF 11.9_g 11.8_x 11.9_z 11.9_x 4,21_e 4,24₄ 4,48₅ 4,24₄ 8 49 90.00 8.48 8.46 8.47 90.00 90.00 90.00 90.00 90.00 90.00 AIPO4
C9H21.78N0.78C0.78*CT0.03Al0.88PO4*20H2O
Al12C00.5FO4)rdC3Hb2NCH2CH2OH
Mgr.21C00.18Al1.28P201.39*0.92H2O-0.20(C2H6O)3N
Mn0.17C00.23Al1.68P207.88*1.02H2O-0.20(C2H6O)3N 13.77 13.71 8.38 8.43 8.38 90.00 120.00 90.00 120.00 11.9_x 11.9_x 11.4_x 4.51₂ 3.97₅ 4.19₁ 4.50₄ 3.92₇ 90.00 HHH 13.77 13.71 44- 44 48-1080 C 90.00 50- 612 48- 684 48- 685 4.43a 4.22a 4.52a 13.61 13.61 90.00 120.00 Alg.475lp.@Po.45Q=0.04C12HzsN=0.15HzO Alg.475lp.@Po.45Q= Alg.Q=Pg.05=0.25lOg=1.5(C2Hg)zN=40HzO SiOg SiOg 47- 618 47- 619 49- 659 12.0_x 11.8_x 3.97_x 11.8_g 4.45_g 3.99₉ 3.93₂ 4.23₇ 4.47₆ 3.92₆ 4.217 4.176 4.496 3.84g 11.8g 00000 Х Н 45- 130 45- 131 13.67 13.67 90.00 90.00 120.00 90.00 120.00 90.00 $\begin{array}{l} C_{0.45}H_{1.124}Al_{0.48}N_{0.054}O_2P_{0.42}Si_{0.07}Ti_{0.05}\text{=}0.054[(C_0H_7)_2N](Ti_{0.05}\dots Al_{0.49}O_2P_{0.49}Si_{0.07}Ti_{0.05}\dots Al_{0.49}O_2P_{0.49}Si_{0.07}Ti_{0.05}\dots Al_{0.49}O_2P_{0.49}Si_{0.07}Ti_{0.05}\dots Al_{0.49}O_2P_{0.49}Si_{0.07}O_{0.08}G_2P_{0.08}G_$ 46- 845 46- 846 47- 680 12.19 3.95₆ 11.8₂ 4.25s 4.23₄ X X R 8.30 90.00 90.00 120.00 13.62 13.62 AIPO-14-AFN Al₇O₃ • 1.00P₂O₅ • 0.91H₂O • 0.49C₄H₁₁N [NH₂(C₃H₇)]a₁₂Co_{6,06}Al_{6,06}Si_{10,06}Pa_{1,0}O₂ • 0.09H₂O Na_{1.2}Al₃Si₂₇O_{57,4} • x(C₁oH₂₇O₃) • zH₇O AlPO₄ 43- 565 46- 630 46- 751 9.61_x 9.80_x 3.85_x 9.83_x 3.92₄ 3.93₃ 3.74₆ 6.71₅ APO-14
APO-41
APO-41
APO-41
APO-41
APO-41
APO-40
APO-40 AIPO4-41-AFO 9.10₈ 4.20_x 4.01₆ 4.02₅ 4.18₆ 3.67₅ 3.88₂ 3.90₄ 90.00 90.00 90.00 110.60 MOXXX AlPO₄ AlPO4 AlPO4 CassHa, 12No.048MgaaszAlo.451P6.457P2*xH2O AlaasShaasPo.46O2*0.02C1eH3tN*0.26H2O AlaasShaasPo.46O2 SAPO-40-AFR (C₁₂H₂₈N)_{3x}Al_{1-x}PO₄=3H₂O Na_{0.017}Al_{2.685}Si_{0.085}P_{0.42}O₂=0.045C₁₂H₂₈N =0.20H₂O Na_{0.017}Al_{0.695}Si_{0.085}P_{0.42}O₂ 6.47₄ 11.6₈ 90.00 90.00 90.00 O 11.6₉ 3.26₂ 4.77₂ 21.70 13.71 14.21 52- 162 47- 626 *00 X MAPSO-46-AFS 41- 558 50-1711 90.00 120.00 H 90.00 120.00 H MgsAl22P26Sl2O112((CsH7)2NH)8 C0.6H1.6N0.10(Si0.13Al0.50P0.27)O2*xH2O C 13.23 13.23 26.83 90.00 13.03 26.73 AIPO4-52--AFT 90.00 90.00 120.00 90.00 90.00 120.00 90.00 90.00 120.00 90.00 90.00 120.00 H H H $\begin{array}{l} AIPO_4\\ AIPO_4\\ (Al_{0.6}P_{0.6})O_2=0.1 (C_2H_0)_4 NH_2PO_4\\ AIPO_4=xH_2O \end{array}$ 12.72 28.95 partially rehydrated

Zeolite Structure Type Name-Code Cell Angles 3 Strongest Cell Parameters Crys. Chemical Sys. Formula PDF# QM Zeolite Name Reflections SAPO-56--AFX 90.00 90.00 120.00 H 13.76 19.95 52-1178 C 47- 763 O 13,76 Al₂₃Si₅P₂₀O₉₈ C₁₈H₃₄N₂-Al₂O₃-SiO₂-Na₂O-H₂O 7.65₆ 4.07_x **SAPO-56** 10.2_x 6.884 10.18 CoAPO-50-AFY CoAPO-50 41- 559 C. 11.0, 3.792 3.682 12.75 12.75 9.02 90.00 90.00 120.00 H Co3Al5P8O32((C3H7)2NH)3 AlPO4-H2—AHT 8.45_E 8.08_g AlPO4-H2 46- 557 C 4.07_E 9.48 9.92 8.14 90.00 90.00 121.47 M AlePeO24*4H2O -ANA Analcime 3.30₈ 5.44₈ 5.60₆ 5.59₈ 2.93₆ Ammonioleucita Ammonioleucite, (Tl) Analcime 40- 474 51-1539 18-1180 5.43, 3.31, 3.43, 3.43, 3.44, 5.53₅ 3.43₆ 2.93₆ 13.71 18.72 13.71 90.00 90.00 90.00 (NH₄,K)AlSi₂O₈ (NH₄,K,Tl,Na)AlSi₂O₆ Na(Si₂Al)O₈•H₂O Na(Si₂Al)O₆•H₂O 13.21 13.21 90.00 80.00 TOCC 13.24 13.72 13.24 13.71 41-1478 13.71 13.74 Analrima č 2.92 13.71 13.74 13,71 13,74 Analcime, (Cs,Ga) 80.00 90.00 90.00 Na7.91Cs5.86Ga13.87Si34.13O96 • 10.04H2O 45- 181 Analcime, (Cs,Ga) Analcime, (Ga) Analcime, (Mg) 45- 182 44- 32 42-1378 3.43g 5.64x 3.52x 3.39x 5.47x 2.92g 3.45g 2.994 5.59g 2.944 2.033 2.896 13.70 13.77 14.71 13.57 13.70 13.77 14.71 No_{7.91}Cs_{5.96}Ga_{12.87}Si_{34.13}O₉₆ NaGaSi₂O₅ • H₂O Na₁₀Mg₂Al₁₈Si₃₂O₉₆ • 25H₂O NH₄Al(SiO₃)₂ • H₂O 13.70 90.00 90.00 90.00 40000 90.00 90.00 90.00 90.00 Analcime, (NH4) 5.54s 3.31a 90.00 14- 19 45- 516 (NH4)1.1Mg0.1Alp.5i2O6 *xH2O i 5.57 Analcime, (NH4) 13.24 13.24 19.75 90.00 3.43_x 3.38_x 3.28_x 3.27_x 43- 136 43-1489 46- 295 38-1423 5.60₉ 2.88₄ 3.50₇ 3.44₇ 3.19₆ 13.73 18.53 13.11 13.07 90.00 90.00 90.00 90.00 90.00 Na13Al24Si13P11Ose 16H2O Analcime, (P) Analcime, (Rb,Mg) 2.93 13.73 13.73 90.00 90.00 CCCTT 13.73 13.11 13.76 12.74 Rb₂MgSi₅O₁₂ Cs₁₆Be₂₄P₂₄O₀₈H₈ KAISi₂O₈ KBSi₂O₈ Beryllophosphate-F 2.84₄ 2.70₅ 90.00 90.00 Leucite 52- 129 3.16. 12.63 12,63 25- 194 29- 407 47- 471 44- 47 46- 418 3.42_x 3.42_x 3.41_x 3.39_x 3.46_x 2.91₆ 3.66₅ 3.64₄ 3.64₆ 3.70₄ 3.65₃ 2.91₅ 2.91₄ 2.90₄ 2.95₄ 90.00 CsAlSioOn *xHoO Pollucite 13.67 13.67 13.67 90,00 80.00 CCCTC 13.67 13.65 13.58 13.84 13.67 13.65 13.58 13.84 13.67 13.65 13.62 13.84 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 Pollucite CaAlSiO₄ Ca₂CuSiaO₁₂ Pollucite Pollucite, (Cu) Pollucite, (Fe) 90.00 90.00 C92Fe2Si4O12 3.42_g 3.32_x 3.60_x 3.26_x 5.67_x 2.91₆ 3.43₇ 3.85₂ 3.11₈ 3.46₂ 13.66 13.27 13.50 13.90 13.80 43-1486 52-1498 6- 212 Cs2Fe2Si4O12 Pollucite,(Fe) C 3.65g 2.87s 13.66 13.66 90.00 90.00 90.00 CTCCC Tl-leucite Unnamed zeolite 13.27 13.50 13.90 13.80 13.72 13.50 13.90 13.80 90,00 90.00 90.00 90.00 TIAISi2O6 AITI(SiO2)2 Rb2Al2(SiO4)2 • H20 K2Al2Si4O12 • H2O 90.00 90.00 90.00 5.54s 2.97s 2.94s 90.00 90.00 90.00 0 Unnamed zeolite 10- 411 11- 186 Unnamed zeolite 3.48_x 3.43_x 3.28_x 3.34_x 3.33_x CsAlGe₂O₈ Hannmed zeolite 37- 347 37- 348 2.976 2.46 13.91 13.70 13.91 13.91 90.00 90.00 90.00 COTT Unnamed zeolite Unnamed zeolite 2.42 13.70 13.88 90.00 RhAlGe₂O 37- 349 37- 350 37-1349 3.477 3.46₆ 3.58₉ 13.13 13.35 13.30 90.00 90.00 90.00 90.00 90.00 90.00 5.424 13.13 40.00 KGaSia0 13.35 13.30 13.84 14.32 90.00 RbGaSi₂O₆ KAlGe₂O₈ Unnamed zeolite 5.51₇ Unnamed zeolite Na;BcSiQO₁₂*2HgO Ca;CdGcqO₁₂ Rb;CdSiQO₁₂ Rb;CdSiQO₁₂ 0.677Na;O*0.01Ti₂O*Al₂O₃*3.59SiO₂*1.57H₂O 0.67Na;O*0.3Li₂O*Ål₂O₃*3.60SiO₂*1.91H₂O 2.85₇ 2.96₂ 13.85 13.90 13.61 13.35 13.90 90.00 90.00 90.00 38- 326 41- 315 3.33, 1.70s 2.46s 13.35 13.90 00000 Unnamed zeplite 90.00 90.00 41- 316 46- 216 46- 217 13.61 13.56 13.70 90.00 90.00 90.00 90.00 90.00 90.00 Unnamed zeolite 2.91 3.65 13.61 90.00 5.61, 5.61, Unnamed zcolite Unnamed zcolite 90.00 46- 218 46- 219 46- 220 50- 273 5- 616 3.40_x 3.45_x 2.85_x 3.70₅ 1.74₆ $\begin{array}{l} 0.27Na_2O \circ 0.70Li_2O \circ Al_2O_3 \circ 3.62SiO_2 \circ 1.93H_2O \\ 0.67Na_2O \circ 0.42(NH_4)_2O \circ Al_2O_3 \circ 3.62SiO_2 \circ 1.19H_2O \\ 0.30Na_2O \circ 0.65(NH_4)_2O \circ Al_2O_3 \circ 3.61SiO_2 \circ 0.60H_2O \\ 0.65(NH_4)_2O \circ Al_2O_3 \circ 3.61SiO_2 \circ 0.60H_2O \end{array}$ 2.89₆ 3.35₄ 13.58 90.00 90.00 90.00 5.58, 13.56 13.56 Unnamed zeolite 5.60, 3.35, Innamed zeplite Unnamed zeolit 4.85 Unnamed zeolite 3.46₁ 2.92₁ 2.95s 3.46s 90.00 90.00 90.00 90.00 13.84 6.89 13.84 6.89 90.00 CaSinTiO. 18.07 CaAl3(PO3OH)(SiO3OH)(OH) 120.00 Ř Viscite 90.00 90.00 90.00 CaAl₂Si₆O₁₅*6H₂O CaAl₂Si₄O₁₅*2H₂O SrAl₂Si₄O₁₂*2H₂O 0.65N₈₂O*Al₂O₃*1.11SiO₂*0.49P₂O₆*2.07H₂O 3.14_s 5.56₆ 5.60₈ 4.14a 3.416 2.93a 2.936 9.89 13.55 13.74 13.73 90.00 90.55 90.00 Wairakite 15- 139 42-1451 7.14_x 3.39_x 10.01 13.69 90.00 90.00 MCC Wairakite 13.64 13.74 Zeolite I. (Sr) 17- 139 3.44 13.74 90.00 Zeolite P-C 38- 319 90.00 90,00 90.00 AlPO4-C -APC Al₁₆P₁₆O₆₄ • 24H₂O Al₁₆P₁₆O₆₄ Al₂O₃ • xP₂O₆ AlPO₄ • 1.5H₂O 6.49₈ 4.96₅ 5.97₈ 6.89_x 3.06₆ 4.47₆ 4.67₈ 3.07₉ 6.86_x 7.05_x 5.07_x 4.26_x AIPO4-C 41- 560 19.35 9.76 90.00 90.00 90.00 O 90.00 O 0000 AIPO4-C AIPO4-C AIPO4-H3 41- 661 45- 457 48- 34 19.82 10.03 90.00 90.00 90.00 90.00 19.24 9.75 9.80 90.00 AIPO4-D--APD C 4.312 90.00 90.00 90.00 O Al18P15O64 AlPO4-D 41- 562 4.299 19.20 9.80 AlPO4-16-AST 90.00 C X 90.00 T X X AlmPmOno(C7H13N)4 AlPO4*1.225H2O 20SiO2*2(C7H12NF) 41- 564 43- 566 48- 475 4.03_x 4.06_x 7.56_x 4.03_x 4.02_x 7.73₆ 7.83₆ 3.93₃ 7.71_x 7.76₇ 4.73₆ 4.75₆ 4.66₂ 4.73₆ 4.75₈ AIPO4-16 AIPO4-16 C 13.38 13.38 13.38 90.00 90.00 9.19 9.19 13.40 90.00 90.00 * 0 0 Octadecasil Octadecaril 476 5iO₂ Co.08H1.82Alo.43No.14O2P0.41Sin.09T0.97 * 0.14[C7H13N](Tin.07Alo.43.;; TIAPSO-16 46-849 4.06 Tiapso-16 46- 85D n 7.76, 3.013 х Ala.43 O2Pa 41Sia.09Tio.07 MAPO-39-ATN 93.84 1 · · MAPO-39 MAPO-39 46- 681 50-1704 0 90.00 90.00 T C_{0.224}H_{0.61}N_{0.034}Mg_{0.036}Al_{0.406}P_{0.433}O₂*xH₂O AlPO₄ 13.09 13.09 5.18 90.00 AlPO4-31--ATO Al₂O₃•0.99P₂O₆•0.56H₂O•0.18C₆H₁₅N AlPO₄ Al_{0.53}Si_{0.04}P_{0.43}O₂•0.04C₆H₁₅N 43- 574 45- 177 47- 631 10.49 3.94₄ 10.4₇ 9.93₈ AIP04-31 AIPO4-81 SAPO-31 SAPO-31 20.83 20.83 90.00 90.00 120.00 MAPO-36-ATS MAPO36 MAPSO-36, calcined 46- 559 52-1177 Ç 10.8₃ 13.15 13.08 21.58 21.47 5.16 5.15 90.00 91.84 90.00 M 90.00 91.87 90.00 M Mg1.0Al10.8P12.2O48 MgAl11Siq.\$P11.5O48 4.66₂ 5.37₄ AIPO4-12-TAMU—ATT AlPO4-12 AlPO4-12-TAMU AlPO4-33 AlPO4-33 $\begin{array}{l} Ai_2O_3 \circ 1.02P_2O_6 \circ 0.75H_2O \circ 0.52C_2H_8N_2 \\ Al_{12}P_{12}O_{49}((CH_9)_4NOH)_4 \\ C_{2.64}H_{7.92}N_{0.66}O_{0.23}Al_2(PO_4)_2 \circ 1.1H_2O \\ AlPO_4 \end{array}$ 6.66₈ 3.24₈ 3.26₉ 2.80₄ 43- 564 3.736 XOXX 0000 41- 565 47- 711 47- 712 7.00_x 6.98_x 6,66_x 8.42₆ 4.31₂ 4.90₄ 10.33 14.64 90.00 90.00 90.00 AlPO4-25--ATV AIPO4-25 AIPO4-25 Al₁₂P₁₂O₄₈ AlPO₄ 9.45 8,41 90.00 90.00

					. ,	Zeolite	Struc	ture T	ype No	ame-	-Cod	e	;
Zeolite Name	PDF#	ΩМ		Stronge		Cell a	Param b	eters C	Cell a	Angle β			Chemical Formula
						•	Al	PO-21-	-AWO	•			
AIPO-21 (Pytrolidine) AIPO4-21	45- 184 . 43- 571 .	Ĉ.	3.88 _x . 6.65 _x	8.78 _x	3.53 _x 3.90 ₃	8.67	17.56	9.19	90.00 1	107.75	90.00	M. X	C4HsAlsNO ₁₂ P3·H ₂ O Al ₂ O ₃ ·1.05P ₂ O ₆ ·0.83H ₂ O-0.67C ₄ H ₂ N
AIPO4-21	45- 179	٠ç 🗀	8.88	3.268	3.897	. 8,47	17.75	9.06	90.00 1	106.78	90.00	M	(C ₂ H ₅ N ₂)Al ₂ P ₃ O ₁₂ •H ₂ O
AlPO4-21 GaPO4-21	46- 455 46- 180	o c	3.86 _x 9.07 _x	8.71 _x . 8.33 ₄	3.50 ₇ 3.51 ₄	8,70	18.15	9.09	90.00	107 28	.90.00	X M	Al ₂ O ₃ •xP ₂ O ₆ Qa ₃ PO ₄) ₂ C ₂ H ₂ N•H ₂ O
Girotzi	10 100	•	:	0.004							.,,,,,,,,,		page of worth 1150
AIPO4-22	41- 567	С	4.79 _x	9.636.	4.31 ₆	13.63		PO4-22 15.46		90.00	90.00	T	Al ₂₄ P ₂₄ O ₂₆ (PO ₃ (OH)) ₂ (C ₇ H ₁₄ N) ₄
AIPO4-22	43- 570	0	4.80,	9.724	4.304	,	10.00	10.40	59.00	20.00		X	Al ₂ O ₁ • 1.03P ₂ O ₅ • 0.81H ₂ O • 0.31C ₈ H ₂₀ N ₂
FAIPO4-22 FAIPO4-22	45- 456 47- 598	0	4.01 _x 9.65 _z	3.07 ₈ 4.80 ₉	4.86 ₂ 4.35 ₆							X X	Al ₂ O ₃ •xP ₂ O ₆ AlPO ₄
2 to 1 to								Beta-	BEA				strate and a
Techernichite	46-1396	0	4.03,	11,63	3.162		•					X	(Ca,Na)Si ₆ Al ₂ O ₁₆ •8H ₂ O
Unnamed zeolite Zeolite Beta	49-1838 48- 38	0	4.04 _x 3.89 _x	3.06 ₂ 11.5 ₉	8.17 ₂ 4.07 ₂			•				X	Na _{0.25} K _{0.05} Ca _{0.92} Mg _{0.01} Al _{2.19} Si _{8.02} O ₁₉ =8.25H ₂ O Na ₂ Al ₂ B ₂ O ₃ SiO ₄
Zeolite Beta	48- 74	. 0	3.99 _a	11.68	4.218		`.					X	Na ₂ O-Al ₂ O ₃ -SiO ₃
A.							\boldsymbol{B}_{i}	kitaite		•			7/3/2
Bikitalte	14- 168	i	3.462	3.37 _x	4.209	8.61	4.96	7.61	90.00	114.40	90.00	W.	Lialsi ₇ O ₅ •H ₂ O
							Bo	oggsite	-BOG	!			
Boggaite	42-1379	С	3.86 _z	11.39	3.377	20.24	23.80	12.80	90.00	90.00	90.00	0	NaarCar4Al185Sirr5O192*74H2O
3.						Be	ryllog	ohosph	ate-H-	_BPI	7		
Beryllophosphate H Beryllophosphate-H	41- 568 46- 298	C	10.9 _k 10.9 _k	12.6s 12.4s	2.79 ₄ 2.79 ₈	12.58 12.59	12.58 12.59	12.45 12.46	90.00		120.00 120.00	H	Na ₇ K ₂ B ₀₁₄ P ₁₄ O ₅₅ *20H ₂ O Na ₇ K ₇ B ₀₁₄ P ₁₄ O ₅₅ *20H ₂ O
Unnamed zeolite	48- 503	i	11.7	13.47	3.005	13.51	13.51	13.41	90.00		120.00	H	(NH ₄) ₂ Al ₂ Si ₂ O ₈ =3.1H ₂ O
							Bre	wsteri	te—BR	\boldsymbol{E}			
Brewsterite	41-1356	*	2.92 _x	4.667	2.19_{5}	6.78	17.52	7.75	90.00	94.47	90.00	M	Sr(Si ₆ A) ₂)O ₁₆ =5H ₂ O
							Car	ncrinit	teCA	N			
Canarinite	34- 176	Ċ	3.21,	4.639	6.805	12.59	12.59	5.12	90.00		120.00	H	Na ₆ Ca ₁ sAl ₆ Si ₆ O ₂₄ (CO ₃) _{1.6}
Cancrinite Cancrinite (Cs,Li,Ti)	46-1332 48- 520	ò	3.22 _x 3.16 _x	3.64 ₈ 4.54 ₄	2.78 ₆ 2.22 ₄	12.60 12.45	12.60 12.45	5.13 5.00	90.00 90.00	90.00	120.00 120.00	H	NacCa2AlcSicO2x(CO3)2°2H2O Lis.asTi_19Cc0_76Alc.sySia.mO2x°xH2O
Cancrinite, (Li,Cs) Cancrinite, (Li,Cs)	45- 124 47- 252	C	3.15 _x 3.15 _x	10.8 ₇ 3.66 ₅	. 3.65 ₅ 8.59 ₄	12.43 12.43	12.43 12.43	4.97	00.00 00.00		120.00 120.00	H	Li _{4.56} Cs _{1.5} Al ₆ Si ₆ O ₂₄ *5.58H ₂ O Li _{4.56} Cs _{1.50} Al ₆ Si ₆ O ₂₄ *4.9H ₂ O
Cancrinite, (Li,TI)	47- 253	3	3.16,	4.533	2.703	12.44	12.44	4.99	90.00		120.00	Ħ	Liz vaTla zaAla suSia 130+4 • 2H2O
Davyne RCR-5	50-1578 47- 235	*	3.66 _x 4.58 _x	4.79 ₇ 3.62 _x	3.27 ₇ 3.19 _x	12.67	12,67	5.33	90.00		120.00	H X	(Na,Ca) _p Al ₆ Si ₆ O ₂₄ (Cl,CO ₂ ,SO ₄) ₃ Li _{1.8} Na _{1.16} Al ₂ Si _{2.88} O _{10.21} *xH ₂ O
Microsommite Unnamed zeolite	20- 743 31-1272	0	4.81 _x 3.25 _x	3.69 <u>.</u> 4.72 ₇	3.29 _x 3.66 ₇	22,12 12,70	22,12 12,70	5.34 5.17	90.00 90.00		120.00 120.00	H	(Na,Ca,K)s(Sf,Al)12O24Cl25 1.06Na2O+Al2O2+1.60SiO2+1.60H2O
Unnamed zeolite	38- 519	*	3.24 _x	3.66 ₈	4.707	12.69	12,69	5.20	90.00	90.00	120.00	H	Nag(AleSieO24)(NO2)2+4H2O
Unnamed zeolite	38- 514 38- 515	0 i	3.68 _x 3.66 _x	6.37 ₆ 6.36 ₆	4.72 ₆ 3.24 ₆	12.73 12.67	12.73 12.67	5.02 5.19	90.00 90.00	80.00	120.00 120.00	H	Nag(AleSisO2e)S2O1+3H2O Nag(AleSisO2e)S+4H2O
Unnamed zeolite	48-1862 46-1333	*	3.64 _x 3.27 _x	3.22 ₀ 3.70 ₉	6.30 ₉ 2.77 ₇	12.62 12.79	12.62 12.79	5.13 5.24	90.00		120.00 120.00	H	NagCaAlgSig[CO3)O2,42H2O NagAlgSigO24(SO4)+2H2O
			•			Cesium .	Alum		cate (A	rabi)_C	A.S	
Ahuminosilicate, (Cs)	41- 569	C	8.61.	3.596	4.115	16.78	13.83	5.02	90.00	90.00	90.00		Ca ₄ Al ₄ Si ₂₀ O ₄₈
					-	•		CIT-5-	-CFI				
CIT-6	51-1382	i	12.1,	12.87	4.423	13.67	5.02	25.56	90.00	90.00	90.00	0	SiO ₂
									hospha	to-5_	–CG	R*	
Cobalt-Gallium-Phosphate-5	49- 618	С	8.84 _x	3.845	3.534	15.00	17.69	15.57	90.00	97.24	90.00	_	C12H22N4*(C04G23P9O22)
		Ť							hospha		_CG		
Cobalt-Gallium-Phosphate-6	49- 622	С	5.39 _x	7.70 _x	10.8 _x	14.86	16.31	8.73	90.00	90.24	90.00	_	C28H56N4*(C04Ga12P16O54)
		•	0.001		20.02							-	
AIPO4-84	47- 166	0	9.21 _e	4.254	5.472		<u>Ch</u>	abazit	e—CH	<u> </u>		x	0.4((CH ₂ CH ₂) ₄ NOH)•Al ₂ O ₃ •1.18P ₂ O ₅ •1.77H ₂ O
AIPO4-94	47- 167 47- 168	0	9.11 _x 9.40 _x	8.66 ₃ 4.29 ₉	4.55 ₃ 2.91 ₇	10.84	17.18	10.48	90.00	90,00	90.00		AIPO4*xH ₂ O AIPO4
AlPO4-34 AlPO4-34	47- 184		9.26 _x	4.322	3.552	13.80	13.80	14.90	90.00	90.00	120.00		C0.27H0.81N0.03CO0.08Al0.45Si0.07P0.43O2*0.10H2O Al0.46Cr0.03Si0.06P0.43O2*0.07C8H21NO*0.1H2O
CAPSO-34 Chabazite	47- 701 34- 137	• •	9.25 _x	4.81 ₆	5.52 ₄ 9.34 ₆	13.78	13.78	14.99	90.00	90.00	120.00		Ca2Al4SiaOz4 • 12H2O
Chabazite Chabazite Chabazite (Al)	52- 784 44- 248	*	9.17,	6.76 ₃ 3.67 _x	4.24 ₂ 2.60 ₈	13.52	13.52	14.73	90.00				SiO₂ NaAlSiO₄•xH₂O
Chabazite, (Ba)	43- 137	č	9.37	2.93_{6}	4.33 ₄ 6.90 ₂	13.80	13.80	15.07	90.00	90.00 90.00	120.00 120.00	R	Ba1_8Al5_8Bi8_2O24*9.7H2O Co0_16(Si0_16Al0_84P0.84C4)*0.18(C3Hz(NH2))*0.2H2O
Chabazite, (Co,P) Chabazite, (Cs)	46- 119 44- 45	C	9.31 _x 2.94 _x	4.323	6,92	13.80 13.84	13.80 13.84	14.85 15.10	90.00 90.00	90.00	120.00		C82.0C80.4Al2.8Sis.2O24.9.5H2O
Chabazite, (Cs) Chabazite, (K)	44- 46 12- 194	č	6.86 _x	4.317	2.91 ₇	13.72 13.85	13.72 13.85	15.18 15.50	90.00 90.00	90.00	120.00 120.00	R	C53,0C80,4Al3,9Si8,3O24 K2Al7O4SiO2*H7O
Chabazite, (Sr)	45-1427	i	9.43	2.93	4.33	13.76	18.76 13.80	15.28 15.10	90.00	90.00	120.00	R	(Ca, K, Sr)-Al4SiaO34 • 12H2O NaAlSirOs • SH2O
Chabazite-Na CoAPO-84	19-1178 50-1479		2.93 _x 4.82 _x	4.82 ₇ 2.93 ₆	9.36	13.80 13.82	13.82	14.79	90.00	90.00	120.00		(P _{0.47} Al _{0.40} Co _{0.12})O ₂
.CoAPO-34	50-1480 50-1481	i	4.31 _x 4.33 _x	2.93e 2.93;	9.26 ₅ 9.33 ₆	13.81	13.81 13.83	14.82 14.87	90.00 90.00	90.00 90.00	120.00		(P _{0.65} Al _{0.21} Co _{0.25})O ₂ (P _{0.66} Al _{0.25} Co _{0.25})O ₂
CoAPO-44	46- 339	Ç	9.34 _x	6.82	4.282	13.63	18.63 13.64	15.28 16.29	90.01 89.99	89.99 89.99	119.98	A	Co. a Si 18.6 P 18 O 73 Co. a Si 18.6 P 18 O 73 Co. a Si 18.1 P 18 O 73
Coapso-47	48- 340 46- 342		9.35 _x 9.35 _x	6.82 ₃ 6.90 ₂	4.292		13.81	14.99	90.00	80.08	120.07	Α	Co2,6Si4,8Al15,8P13.6O72
5APO-34 F SAPO-34	47- 429 47- 617		9.29, 9.31,	4.32 ₆ 4.31 ₇	3.55 ₄ 5.52 ₆	13.78	13.78	14.85	90.00		120.00		(Siq.8sAl4.psP3.psiO1e*xH2O · Alq.soSiq.1pPq.soO2*0.08CeH2pN*0.17H2O
SAPO-44	47- 629 47- 630	0	9.81,	4.24,	2.89 ₈ 6.84 ₅							X	. Alo.485io.11Po.41O3 * 0.14C6H18N * 0.16H2O . Alo.485io.11Po.41O2
SAPO-44 SAPO-47	47- 630		9.30 _x 9.33 _x	4.285	3.594	13.73	18.73	15.05	90.00	90.00	120.00	R	AleBi1.4P46O24(C6H12NH2)1.4.2.5H2O
. 5SZ-13 TIAPSO-34	47- 762 46- 851	0	4.27 _a 9.41 _a	5.47 ₇ 4.33 _x	9.23 ₆ 5.54 ₈		-					X	C ₁₃ H ₂₄ N-Al ₂ O ₃ -SiO ₂ -Na ₂ O-H ₂ O C _{0.824} H _{2.05} Al _{0.63} N _{0.105} O ₂ P _{0.61} Si _{0.11} Ti _{0.10} • 0.103[(C ₂ H ₆) ₄ N](Ti _{0.10}
TiAPSO-34	46- 852	0	9.31	4.27. 9.31a	6.81 ₃ 4.04 ₈							X	Alp.4503Pc.418io.11Tiq.10 CeH13N-Al2O3-P2O6-SiO2-TiO2
TiAPSO-44 Unnamed reolite	46- 856 47- 356	J	4.27 _z 2.92 _x	3.685	9.484		13.79	15.59	90.00	90.00		R	Nage AA170.4Si41.2O207.2
Willhendersonite ZK-14, (K,TMA)	35- 643 37- 792		9.16 _x 2.93 _x	2.91 ₈ 2.89 ₅	2.80s	9.18	9.14 13.80	9.48 15.12	92.50 90.00	92.31 90.00	90.05	A	KCaAl ₃ Sl ₃ O ₁₂ •5H ₂ O K _{10,B} Al _{11,1} O ₇₂ Si _{24,9} •25H ₂ O
ZYT-6	44-1389 49- 658	С	9.30, 18.2,	4.32g 4.54g	6.89g 4.65g	13.78	. 13.78	14.85	90.00	90.00			(H ₃ O(Al ₄ SiP ₃ O ₁₀)) _{6,8} •0.36H ₂ O Co _{0.04} Al _{6.4} Si _{0.08} P _{0.44} O ₂ •0.48H ₂ O •0.43C ₆ H ₁₂ N
Zeolite Co(APSO)44	20° 000		40.42	7.073	4,003	•						~•	
SO:													•

Collection Col								Zeoli	te St	ructure	Туре	Nan	ie—C	ode	
Section 1.65		Zeolite Name	PDF	# QN	1	3 Stroi Reflect	ngest tions							Cr. Sy	ys. Chemical 's. Formula
Section Sect								13.6	7 13.6	7 15.46	90.0	0 90.	00 120,		SrAlaSicOse6HeO
Chiracolor Chi		Zcolite.P-G	. 38- 32	1	9.46	2.95	4.367				80.0	0 90.		Ю R	KAISiO4*xH2O 0.54K2O*Al2O3*1.54SiO2*0.36P2O4*3.82H2O
Second S				-	0.10	2	. 4.008	. 10.0					UD 12D.(0 R	0.84Na ₂ O•Al ₂ O ₃ •1.92SiO ₂ •0.3P ₂ O ₆ •4.12H ₂ O
Clieratic Control Co		Chiavennite	35- 60	2	15.7	2.90,	3.28	. 8.7					nn nn	. n	
Charles		•		:	:•	•							30.0		Camn**Bc ₂ Si ₅ O ₁₅ (OH) ₂ •2H ₂ O
Company					26.4	9,32			1 52.7				00.00	0 C	GRAPA DALI (OH) E
CFT-1	•	5.644.116	20-1 (U	, c	25.8,	9.142	18.32	51.7	1 51.7	1 51.71	90.0	0 90.0	90.0	0 Č	2C ₁₇ H ₁₄ FN •Ga ₄ P ₈ O ₃₃
Section Sect		CIT-1	50-1694	ı i	11.3.	. 115.	. 224.	99 C				_			
Section Color Co			50-170	3 C	11.3,	11.54	9.722	22.63	2 13.3	12.36	90,00	0 68.9	90.0	0 м	Si ₅₆ O ₁₁₂ Si ₅₆ O ₁₁₂ .
Section Sect			47- 355	. 0	11.4,	3.86 _x	4.406	22.00	13,2	12.38	90.00	58.8	1 90.0	X	Na ₂ O-Al ₂ O ₃ -SiO ₂
Chiral Zincephosphosphosphosphosphosphosphosphosphos	8	SSZ-33	52- 109	0			-	23.90	13.29	12.32	90.00	66.9	3 90.0		
December 19								CH	iral :	Zincop.	hosph	ate-			
Decision 18	C	Chiral Zincophosphate	49- 621	C	7.78 _g	3.06 _g	5.80 _g							н	Na ₁₂ [Zn ₁₂ P ₁₂ O ₄₈] • 12H ₂ O
Decision		N T !							Do	ichiard	liteL	DAC			
Deca-decasil-SR			18- 467 30-1149	i i			1.87 ₈ 8.86 ₈				90.00	107.8			(Cn,Na,K,Mg)4(Si,Al)24O48 • 13H2O
Decision 1.5								1	Deca-		_				144/A1421801048 • 13H2O
December Column	D	oca-dodecasil-3R						13.89	13.89	40.99	90.00	90.0	0 120.00		SiO₂
Unamed scalite	u	Innamed zeolite	48- 235	*	5.15	3.397	5,716	13.73	13.73	41.39	90.00	90.00	0 120.00	H	Si120O240(N2)a(C1aH12N)a
Dodecasil-IH			49- 75	*	5.16 _x	4.477									120SiO ₂ -61 ₂
Pole-cardi-1H	U	nnamed zeonte	49- 76	*	5.17 _x	5.75 ₇	3.396	13.84	13.84	40.85	90.00	90.00	120.00	Н	120SiO ₂ •6S ₇
UTD-1	D	odecasil-1H	41- 572	c	119	E 90	11.0								•
UTD1 as synthesized \$\$ 45-1622 i 16.78, 41.43, 41.56, 41.57				•	*****	u.55 ₄	11.57	13.78					120.00	Н	Si ₂₄ O ₆₅ (N ₂) ₃ (N ₂) ₂ (C ₆ H ₁₀ NH)
Delibergin					14.7 _x	11.54	4.212	18.98	_			-			
Relibergite	U	TD-1 as synthesized	52- 160	0	4.19,	4.036					50.00	30.00	30.00		xC ₂₀ H ₃₀ C ₀ OH•SiO ₂ •zH ₂ O
E-Sellie E (Na, TMA) Sellie E (Na, TMA) Sell	В	ellbergita	45-1489		9 90	Ø E D	0.05		_						•
Coulte E, (N. Tada)	R	AB	41- 573		,3.77 _x	9.17	3.61	13.28	13.28	15.21	90.00	90.00	120.00		Nag ((CHa)AN)2 2Ala ASiac cOm(OH)2 a 25H-O
Beryllophosphate-E			44-1392		6.54	9.069	4.124	13.07	13.07	15.10	90.00	90.00	120.00	H	C12H3gAl9N3Na7O72Si27 • 17H2O
Berylispharphate-E					0.702	3208	3.027	13.28					120.00	H	C ₈ H ₂₄ Al ₉ N ₂ N ₂ N ₂ O ₇₂ Si ₂₇ • 26H ₂ O
Part				í	6.48 _x	2.78	2.874	9.17					00.00		V D D D D D D D D D D D D D D D D D D D
Dense P, (Bi, Li) 3 - 742	Ec	lingtonite, (K.Cl)	45- 123	С	3.08 _x	4.70 ₇ 3.05 _x	3.597	P.53	9.65	6.51	90.00	90.00	90.00	0	BaAl ₂ Si ₃ O ₁₀ •4H ₂ O
Species F, No. 25-717 3.15, 7.10s 3.05,	Pì	ningtonite, (LA) nase P, (Ba,Li)			3.59 _x 7.01 _x	2.75 _x 3.08 _x		9.57	9.57					T	LiBa _{0.5} Al ₂ Si ₃ O ₁₀ •4H ₂ O
Zeolite P, (Na) 38 - 217	Uz	anamod zeolite						R QR	8 00	P on	00.00	BO 00		х	NagAlzSizOn*xHzO
Zeolite F, (Na) 33- 215	Ze	olite F			2.99,	3.119	2.847	9.95	9.95	13.20	90.00	80.00	90.00	T	RbAlSiO ₄ •H ₂ O
Zeolite N		·			_	3.07a	2.81,	9.83	9.83	13.09	90.00	90.00	90.00	T	KAISiO ₄ • 1.5H ₂ O
CSZ-1						3.099	2.967								Na ₅ Al ₅ Si ₅ O ₂₀ • 9H ₂ O K ₁₂ Al ₂₀ Si ₁₀ O ₄₀ Cl ₂ • 8H ₂ O
CSC-1	-								į	EMC-2-	-EMT				
EDIT (NA) 46-566 C 15.1, 4.2, 13.3, 17.45 17.35 17.30 17.30 28.78 90.00 90.00 120.00 H Nalpachization of the content of the co	CS	Z-1	47- 723	0	14.1,	15.1 ₆	3.70s			28.36 28.41					Cso.e4Naz.p4Al ₂ Si _{4.29} O _{12.42}
SSM-20	EN	IT (Na)	46- 566	Ċ	15.1 _e	14.2	13.3 _g	17.30 17.45		28.78	90.00	90.00	120.00	Ħ	C1,84H20,16N2,12N20,88Al2Sito 00000
2SM-20 47- 553	ZS	M-20					-	17.35	17.35						NA1.96A12516.84U17.05
2SM-3	Z S	M-20	47- 554		14.7	13.9g	5.624								C20111014-1482U-A12O3-S1U5-H5O
Epist Sam-3	ZS.	M-20, dealuminated M-3			14.1 _x	14.8,	5.60_3	17.17	17.17	28.28	90.00	90.00	120.00	H	SiO ₂
Epistilbite	ZS	M-3	48- 73D	i											
APO4-17	_								E_{I}	istilbii	e—EP	I		•	2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
AIPO4-17	Ep	stilbite	39-1381	*	8.90,	3.459	3.218	9.09	17.75	10,23	90.00	124.65	90.00	M	Ca ₂ (Si ₂ Al ₃)O ₂₄ *8H ₂ O
AlPO4-17	AIF	PO4-17	41- 574	٠.		c cn			_		_ERI				
SAPO-17	Alf	204-17	43- 567	0	11.6.	4.33_{9}	2.817	13.24	13.24	14.77	90.00	90.00	120.00	H	Al ₁₈ P ₁₈ O ₇₈ (C ₅ H ₁₁ N), •4H ₂ O Al ₂ O ₃ •0.99P•O ₅ •0.87H ₂ O•0.46C+H ₂ N
SAPO-17 47-021 6.56, 11.5, 9.17, 13.30 13.30 15.10 90.00 90.00 120.00 H	Eri	onite	39-1379	*	2.85	3.779	4.358	13.30	13.30	15.08	90.00	90.00	120.00	X	AlPO ₄
Unnamed zsolite 42 369 i 6.55; 11.29 3.576 13.19 13.19 15.04 90.00 90.00 120.00 H H22TLS(Na,Ca,Mg/ba/Fep,a/la,oSig17,rOy2*xHgO Unnamed zsolite 42 370 i 11.5, 6.60a 3.74a 13.13 13.13 15.03 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*xHgO Unnamed zsolite 42 372 6.51a 11.5a 3.57a 13.09 13.09 13.09 15.09 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*xHgO Unnamed zsolite 42 373 11.4a 6.57a 2.865 13.20 13.20 15.09 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*xHgO Unnamed zsolite 42 375 11.4a 3.81a 6.59a 13.22 13.20 15.07 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*xHgO Unnamed zsolite 42 375 11.4a 3.81a 6.59a 13.22 13.22 15.07 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*xHgO Unnamed zsolite 42 375 11.4b 6.57a 2.865 13.20 13.20 15.07 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*xHgO Unnamed zsolite 42 375 11.4b 6.57a 2.865 13.20 13.22 13.22 15.07 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*xHgO Unnamed zsolite 42 375 11.5a 3.76a 8.60a 13.22 13.22 15.07 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*xHgO Unnamed zsolite 47 358 O 9.32a 8.88a 6.92 13.23 15.20 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*XHgO Unnamed zsolite 42 374 O 6.59a 13.23 13.23 15.20 15.00 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*XHgO Unnamed zsolite 47 358 O 9.32a 8.88a 6.92 13.23 15.20 15.20 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*XHgO Unnamed zsolite 42 374 O 6.59a 13.23 13.23 15.20 15.20 90.00 90.00 120.00 H KoasNon.itz/AlSSin.ot/Ozass*XHgO Unnamed zsolite 42 375	SAI	PO-17	47- 621		6.56 _x	11.50	9.173	13.30	13.30	15.10	90.00	90 On	190 00	X	Al _{0.56} Si _{0.02} P _{0.42} O ₂ =0.103C ₆ H ₁₃ N
Unnamed zeolite 42 370 i 11.5, 6.60s 3.74s 13.13 13.13 15.03 90.00 90.00 120.00 H KossNoszAlsSinstOzsss*xHyO Unnamed zeolite 42 372 6.5.1s 11.3s 3.57s 13.29 13.29 15.09 90.00 90.00 120.00 H KossNoszAlsSinstOzsss*xHyO Unnamed zeolite 42 373 11.4s 6.57s 2.86s 13.20 13.20 15.02 90.00 90.00 120.00 H KossNoszAlsSinstOzsss*xHyO Unnamed zeolite 42 375 11.4s 3.81s 6.59s 13.20 13.20 15.02 90.00 90.00 120.00 H KossNoszAlsSinstOzsss*xHyO Unnamed zeolite 46 675 i 11.5s 3.76s 3.60s 13.22 13.22 13.20 15.07 90.00 90.00 120.00 H KossNoszAlsSinstOzsss*xHyO Unnamed zeolite 47 358 O 9.32z 8.88s 6.92 ZSM-34 42 308 O 11.5 8.76s 3.60s 3.59s 5.89s 5.8	Uni	named zeolite	42- 369	i	6.55 _x	11.28	4.32 ₆ 3.57 ₆	13.19 18.07	13.19	15.04	90.00	90.00	120.00	H	He.2K1.5(Na,Ca,Mg)0.5Fep.3Ala 0Si27 7O79 * xH0O
Unnamed zeolite 42 372 6.51 _x 11.3 _y 6.57 _x 2.86 _x 13.09 13.09 15.09 90.00 90.00 120.00 H Kg_2Mo_3m_151_8(PC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15x15QC_2_15X15QC_2_15QC_2	Un	named zeolito				6.60 ₈ 2.86 ₇	8.746	13.13	13.13	15.03	90.00	90.00	120.00	H .	K0.56N80.054Al2Si11.18Q25.61*xH2O
Unnamed zeolite 42- 375 11.4 3.845 6.554 13.22 13.22 15.07 90.00 120.00 H Kolsheomethyllian (Kolsheomethyllian (Kolsheomethylli	Uni	named scolite			11.4-		3.57 ₆ 2.85-		13.09	15.09	90.00	90.00	120.00	H	K0,20Na0,24Al2Si10,26O23.78*xH2O
Unhamed zeolite 47- 358 O 9.32 _x 8.88 _h 6.92 _z 8.88 _h 6.92	Uni	named zeolite named zeolite	42- 375 46- 675	i	11.4.	3.815	6.594	13.22	13.22	15.07	90.00	90.00	120.00	H I	Ko.4/Nao.066Al2Si7.79O18.78*xH2O Ko.14/Nao.125Al2Si8.31O18.75*xH2O
ZSM-34 42- 374 O 6.59, 11.4s 3.58s 13.11 13.11 15.05 90.00 90.00 120.00 H K-Na-Al ₂ -Si-O-H ₂ O			47- 358		9.32 _x	6.88 ₃	6.92_2			.0.20	9U.UU	∌ 0.00	120.00	n,	KanagaGanagaSianaOys sa • 250HaO • CaaFlaaO • Na
	ZSA	4-34	42- 374	Ö	6.59 _x	11.48	3.584	13.11	13.11	15.05	90.00	90.00	120.00 ·	H	K-Na-Alz-Si-O-H2O
						va	J. 445							X (C6.4H17.9N1.3O1.28*K0.94N20.26Al2Si10.8O25.7

Ž.			Zeoli	e Stru	cture 7	Type No	me-	-Code	2		_
reolite Name	PDF# QM	3 Stron Reflect		eli Parar b	neters c	Cell a.	Angle			Chemical & Formulation MOCESCH Series	
					EU-1-	-EUO			-	and the second s	
Innamed zeolita	45-406 O	, 4.30x 8.996	3.284						X	ZOSSIUSTAISUS	440
	•	0.40	,			90.00	-	120.00	н		i
\$2.1 \$2.1	47- 722 O 47- 723 O 52- 161 *	3.40 _x 14.2 ₄ 14.1 _x 15.1 ₄ 14.3 ₄ 5.67;	3.70 ₆ 17.4	2 17.42	28.35 28.41 24.73	90.00		120.00 120.00 90.00	H	Сво «Ма] "од А], Бід 20 (12.45 No-TI-AI-Si-O (С.Н_и, N, C;; H ₂₀ N)-(Co, AI)-PQ ₄ -H ₂ O	Š
DEAPO DEZ-1A	47- 249 i 47- 250 *	13.6, 3.57, 14.6, 3.37,	3.704 23.3	23.38	23.38 25.23	90.00	90.00	90.00	Č	NewsBepsPesO192*192H2O	
DPZ-1B. Žis.30 Kirjanite	47- 655 i	15.0 _x 14.2 _c	5.653 • 17.8	17.30	28.78	90.00	90.00	120:00 90.00	H	C7.54H20.16V.12NR0.28AP210.07C025.04 Nr2AlsSig.7010.6*7H2O	
Figurate	12- 228 i 12- 246 i 28-1034 O	14.3 _x 5.71, 14.5 _x 5.74, 15.0 _x 2.96,	2.88 ₈ 24.9	24.96	24.83 24.96 25.59	90.00 90.00	90.00 90.00	90.00	č	Ne ₂ Al ₂ Si ₂ 4O _{8.8} -6.7H ₂ O	į
Paulanite Eminaite	39-1380 i	14.3 _x 3.76,	5.67 ₈ 24.6	8 24.68	24.68	90.00	90.00	90.00	Ċ	N82A354019*SH3O N82A354012*6H3O 0.95BaO*0.05Na ₂ O*Al ₂ O ₃ *3.3SiO ₂ *6H ₂ O	Ę
Na-Ba exchanged NaX-Zeolite	47- 1 47-786 i	3.76 _x 3.80 ₀ 14.8 _x 3.80 ₀ 3.26 _x 4.71 ₀	5.713 24.9		24.92 24.92	90.00 90.00	90.00 90.00	90.00	Č	Cu ₁₇ Ne ₂₅ (NH ₄) ₂₇ Al ₉₆ Si ₁₀₆ O ₃₉₄ (H ₂ O) ₁₇₂ (NH ₂) ₆₄ Na ₁₄ Al ₁₂ Si ₁₃ O ₆₁ 6H ₂ O	. ;
SAPO-87	28-1036 47- 624 O 47- 625 O	14.3 _x 5.68 14.3 _x 5.57	3.794						X	AlosiSio,155Po,365O2 * 0.065C12H26N * 0.035C4H12N * 0.22H2O AlosiSio,125Po,365O2	
EAPO-87 Steachanged	47- 2	14.4 _x 8.81,	2.897 24.9		24,99 24.17	90.00 80.00	90.00	90.00	Ç	0.93\$rO+0.07Na ₂ O+Al ₂ O ₃ +2.5\$iO ₂ +6H ₂ O H _{18.9} Al _{18.9} Si _{173.1} O ₃₈₄	
Dinamed zeolite	42- 18 C 13- 549 28-1883 *	14.0 _x 3.69 8.80 _x 3.79 14.3 _x 3.77	3.32 _x 24.5	5 24.85	24.85 24.75	90.00	90.00	90.00	CC	C.H18A12NO2Si*2H2O Ceach1872A1c47K31.2N23.4O384Si137.3*111H2O	
Unnamed zeolite	26-1884 *	14.3 _x 3.77	6.681 24.7	4 24.74	24.74	90.00	90.00 90.00	90.00	Ċ	C27.6H188Al54,7K27.3N27.6O384Si127.3*124H2O C66.4H188Al54.7K35.3N18.8O384Si127.3*101H2O	
Innamed zeolite	26-1885 * 47- 3 i 43- 46 O	14.5 _x 3.78 14.4 _x 3.80 15.1 _x 14.3	2.887 24.8		24.75 24.89	90.00 90.00	90.00	90.00	Č	0.8CaO • 0.2NayO • Al2O3 • 3.0SiO2 • 6H2O C254H7,83Al2No,4Na1,4O20.24Sia.1	•
75M-20 75M-20 75M-20	43- 46 O 47- 553 O 47- 554 O	15.1 _x 14.3 14.7 _x 13.9 3.27 _x 2.84	8 6.624 17.	0 17.30 0 17.30	28.60 28.60	90.00 90.00	90,00 90.00	120.00 120.00	H	C ₂₀ H ₁₀ N-Ne ₂ O-Al ₂ O ₃ -SiO ₂ -H ₂ O C ₂₀ H ₁₀ N-Ne ₂ O-Al ₂ O ₃ -SiO ₂ -H ₂ O	-
ZSM-20, dealuminated	45- 111 i	14.1 _x 14.8	x 5.60 ₃ 17.3	7 17.17	28.28	90.00	90.00	120.00 120.00	H H	SiO ₂ Ll ₂ O-N ₂₂ O-Al ₂ O ₅ -SiO ₂ -H ₂ O	
ZSM-3 ZSM-3	38- 317 O 48- 730 i 45- 128 C	14.2 _x 16.3 3.36 _x 3.32 14.6 _x 8.92	a 3.04g 29.0	0 29.00	18.77 25.23	90.00	90.00	120.00	H	Na _{1,88} Al ₂ Si _{2,77} O ₉ ,48 Na _{4,81} ZnPO ₂) ₉₆ • 125H ₂ O	
Zalite (Na,Zn,P) Zolite X, (Ag)	38- 233 *	14.4 2.79	6.232 24.1	6 24.96	24.96	90.00	90.00	90.00	C	(Ag,Na) ₂ •Al ₂ Si _{2.5} O ₃ •xH ₂ O (Ba,Na)•Al ₂ Si _{2.5} O ₈ •6.2H ₂ O	•
Zelite X, (Bs) Zelite X, (Ca)	38- 234 i 38- 232 i	14.4 _x 7.21 14.4 _x 3.80 14.4 _x 3.81	2 5.712 24.5	0 24.90	24.90	90.00 90.00	90.00	90.00 90.00	CC	(Ca,Na)•Al ₂ Si _{2,5} O ₂ •6.4H ₂ O (CaO) ₃ (Al ₂ Si _{2,5} O ₂) ₃ •xH ₂ O	
Zejita X, (Ce) Zejita X, (Gd) Zejita X, (K)	38- 235 i 43- 149 C 26- 898 *	14.4 _x 3.81 14.5 _x 7.24 14.5 _x 2.90	g 6.27 ₇ 25.0	7 25.07	25.07	90.00	90.00 90.00	90.00	Č	Na ₇ Gd ₂₇ (Al _{88.11} Si _{103.9} O ₃₈₄)*19H ₂ O K _{86.5} Al _{86.6} Si _{106.6} O ₃₈₄ *258H ₂ O	
CD T at the second	38- 236 i	14.4, 3.79	8.322 24.	8 24.88	24.88	90.00	90.00 90.00	90.00	•	(Li,Na) ₂ •Al ₂ Si ₂ 6O ₉ •7.2H ₂ O (NH ₄ ,Na) ₂ •Al ₂ Si ₂ 6O ₉ •xH ₂ O	
Zeniite X, (NH4) Zeniite X, (Na)	39- 139 i 38- 237 * 39- 218 C	14.4 _x 8.81 14.5 _x 3.81 14.5 _x 8.85	2 2.892 24.	9 24.99	24.99	90.00	90.00	90.00 90.00	č	Na ₂ Al ₂ Si _{2,5} O ₉ • 6.2H ₂ O Na ₅₈ Al ₂₅ Si ₁₀₄ O _{38,i} • 220H ₂ O	
Zeonica X. (Na) 7250life X. (Na)	41- 118 i	3.82, 14.6	8.348 24.	6 24.96	24.96	90.00	90.00	90.00	C	C ₆ H ₄ O ₂ •Na ₃ O•Al ₂ O ₃ •3.3SiO ₂ •7H ₂ O K _{86,5} Al _{86,5} Si _{106,6} O ₃₈₄	
Zechte X, OO Zechte Y Zechte Y	26-895 * 38-238 * 38-239 i	14.5 _x 8.82 14.3 _x 3.31 14.3 _x 5.67	2.865 24.	6 24.76	24.76	90.00 90.00	90.00	90.00	Č	Nala4AlsSi4O1192*TH2O Nala8AlsSi4,6O1264*9H2O	
Zolite Y Zolite Y	38- 240 i 40- 336 *	14.3 _s 3.78	s 2.88s 24.	7 24.77	24.77	90.00	90.00 90.00	90.00 90.00	. C	Na266Al2Si3.6O11.63 *8H2O Na21Mg21.7(NH4)13.6Ål66Si183O384 *240H2O	
7070	46- 568 C 26- 893 *	7.47, 5.68	s 5.064 24.	18 24.78	24.78	90.00	90.00 90.00	90.00	C	K _{65.8} Ga _{56.6} Si _{126.2} C ₃₈₄ *241H ₂ O K _{63.8} Al _{65.8} Si _{122.2} C ₃₈₄	
Zicolite Y, (K)	26-894 i 26-896 *	14.3 _x 5.66	32 3.782 24.	7B 24.78	24.78	90.00	90.00 90.00	90.00	C	K42,2A142,9Si 143,6O384 K42,2A142,3Si 143,6O384 * 243H2O	
Zelite Y (K.CH) Selite Y, (K) Zelite Y, (K) Zelite Y, (K) Zelite Y, (K)	28-897 * 26-899 i	14.4, 3.86 14.3, 3.7	2.881 24.	92 24.92	24.92	90.00	90.00	90.00	C	Kee,Alee,CSi1222O384*247H2O K15,5(NH4)38,5Ale4,7Si137,3O884*101H2O	!
Wichia V (Na Pa P)	43- 168 * 45- 125 C	14.2, 3.70	5e 5.66s 24.	58 24.68	24.68	90.00	90.00 90.00	90.00 90.00		Ne ₂ Al ₂ Si _{4,5} O ₁₃ °xH ₂ O Ne ₂₆ (BePO ₄) ₂₆	:
Zelite Y, (Na,Mg,Be,P)	45- 127 C 45- 112 *	18.4 8.2	2 7.01a 23.	24 23.24	23.24	90.00 90.00	90.00 90.00	90.00 90.00		NaceMgm(BePO4)06 SiO2	
				1	errieri	ite-FE	R				
Parrierite Petrierite, (Ga)	39-1382 ★ 46- 30 i	9.60 _x 3.9 3.78 _x 3.8	6 _x 3.48 _x 19.			90.00 90.00	90.00	90.00 90.00		NaMg(Si16Al3)O28*9H2O Na34Ga4,7Si313O78*xH2O	
ZSM-35 ZSM-35	44- 104 0 44- 109 0	9.52 3.5 4.25 3.6	3 ₈ 3.46 ₆ 5 ₆ 3.13 ₄						X	Na _{0.22} Al ₂ Si _{22.9} O _{64.46} 9.9H ₂ O Pr(MnO ₂) ₂ •4H ₂ O	
ZEM-35 ZEM-38	51- 242 C	-	•						X	Na _{0.45} AlSi ₁₁ O _{47.2} * 0.55C ₁₅ H ₄₂ NOH * xH ₂ O Na _{0.86} Al ₂ NL ₀₅ Si _{11.85} O _{27.71} * 5.28H ₂ O	也 10
28M-38	44- 105 C 49- 922 C	3.56 _x 3.5	0 _x 4.01 ₈ 6 ₈ 3.96 ₇						X	0.48Ns ₂ O•Al ₂ O ₃ =0.53N ₂ O•11.85SiO ₂ =5.28H ₂ O•C ₆ H ₁₄ NO C _{27,93} H _{61,74} Br _{1,47} N _{1,47} •Ns _{2,38} Al _{3,85} Si _{32,15} O ₇₂	•
Colite D, (Sr)	18-1266 C 49- 923 C	3.48, 3.5		01 14.13	3 7.48	90.00	90.00	90.00 :	X	C27.83H81.74Br1.47N1.47 Na2.39Ga3.85Si22.15O73	. [
CVECV				_		ite—FR				respondence of the second	M.
inhimite	30-1170 i	3.72 _x 3.5	96 3.814 12	88 12.8		90.00		120.00	В	(Na,Ca)(Si,Al) ₁₂ O ₂₄ (BO ₄ ,OH,CO ₃) ₅ •H ₂ O	2.70
46	33-1273 i	2.72 _x 4.2	2 ₀ 3.14 ₈ 10	<u>G</u> 23 10.4		1ine-G	88.32	90.00	M	\sinls* K ₂ Na ₃ Al ₄ Si ₄ O ₁₆ •5H ₂ O	
Dayllophosphate-G	46- 293 i 52-1510 i	6.27 ₂ 3.7	1, 2.71, 9	32 8.4 21 10.2	8 9.13	90.00 90.00	90.80 90.00	90.00	M	Na ₈ Ba ₂ P ₆ O ₃₂ •10H ₂ O	27. 3
Geronite	39-1374 51-1499		58 7.158 9	89 9.8 9.9 9.9		90.00 90.00	90.00			NaCa _{2.6} (Si ₁₀ Al ₆)O ₂₀ -14H ₂ O Ca ₂ Al ₆ Si ₂ O ₂₀ -15H ₂ O	
Giamondine Commission	20- 452 39-1373			.02 10.6 .02 10.6		90.00 90.00	92.48 92.47	90.00		Alo,16Coo,16PO,*0.5C3H;0No*0.5H;2O NaCes,16SipAle)Oz*2+1H;O CasAlsSicOz*3+1H;O CasAlsSicOz*4H;O CasAlsSicOz*4H;O CasAlsSicOz*5H;O NaCa(SipAle)Ozz*12H;O 0.95Ne;O*Al;Oz*3.38SiOz*4.79H;O	
(Jamondine (dehydrated)	46- 341 (85- 559		89 3.136 13	.90 B.8 .45 10.1	9 13.95	90.00 90.00	90.00 90.00	90.00	0	Ca,Al ₂ Si ₃ O ₃₂ *8H ₂ O Na ₄ Ca(Si ₁₀ Al ₃ O ₃₂ *12H ₂ O	
Amrits Amrits Amrits Amrits Amrits Amrits CAPO-43 Entremite Corrente Corren	38- 327 (38- 328 (3.18 _x 7.0	8 ₉ 4.10 ₈						X X	0.95Ne ₂ O • Al ₂ O ₃ • 3.35SiO ₂ • 4.79H ₂ O 0.99Ne ₂ O • Al ₂ O ₃ • 4.07SiO ₂ • 5.7H ₂ O ₁	
Linde B3) 7.08 _x 3.2	20 ₂ 4.11 ₇ 20 ₂ 7.08 ₇						X	1 DANIS DO ALCO OR 74SIU2 SORIUL	
MAPO-48 Species P1, (Na)			185 5.114 10	.22 10.2 .99 9.9		90.00	90.00 90.00			Mg2AlePeOe3(CeHteN2 Na3AlsSiioOte*6H2O	
dide B2 Links B3 Links B7 Link	25- 779 16- 355	4.10 _z 3.1	19 ₁ 7.15 ₆ 10	.09 10.0 .88 9.8	8 9.88	90.00	90.00	90.00	C	NagalsSigO16-6H2O	
Uniterned zeolite		i 3.16, 7.0 7.10, 4.0	09 ₈ 4.08 ₆ 10 09 ₈ 3.17 ₈ 10	.00 10.0	0 10.00	90.00 90.00	90.00	90.00) C	MgasAla7Sin3U37	
Prolite P, (Na)	40-1464 44- 52	★ 3.16 ₁ 2.0	58 _K 7.09 ₀ 10	.00 10.0		90.00		90.00	з т	NascAlaconization	
Apolito P. (Na) Apolito P.B Zeolito PI. (Na)	38- 325	3.20 _x 7.0 C 3.18 _x 7.1	08g 5.01g 10g 4.10g 1	0.10 10.1 0.04 - 10.0	0 9.80 4 10.04	90.00 90.00	90.00 90.00	90.00	T	NagAlaSijoOj2•12HgO	2
colte Pt		i 3.19 _x 4.	11, 7.13, 1	.11 10.1		90.00				Nas, Als, Siles, Care Control of the	₩ (G2 :
18 (C) (C)											ř.

					· <u>z</u>				Type N			_	•
Zeolite Name	PDF#	МД		Strong eflectio		Cell a	Paran b	neters C	Ce α	li Angi B			Chemical Formula
ZCOMO (14m)							Gr	nelinii					
ECR-26	50-1692	i.	5.02 _x .	6.887	11.97	13.74	13.74	10.04	90.00		120.00	н	Na2,44Cr0.52Fe0.54Alo.04Si6O15.33+H2O
ECR-26 ·	50-1693 38- 435	. i	11.9,	5.017	6.86 ₇ . 2.98 ₆	13.74 13.75	13.74 13.75	10.03 10.06	90.00 90:00	90.00	120.00 120.00	H	No _{2.03} Cr _{0.50} Al _{1.80} Si _{6.19} O _{14.42} Na ₂ Al ₂ Si ₄ O ₁₂ •6H ₂ O
Gmelinite Unnamed zeolite	31-1321		4.11 _x 4.11 _x	11.9 ₆ 4.50 ₆	3.235	13.73	13.73	10.07	€0.00	90.00	120.00	H	Al _{5.3} N ₂ Na _{3.66} Si _{18.7} O _{14.61} • xH ₂ O
Zeolite F, (Sr)	17- 141	٥.	4.99_	4.12 _x	2,99	13.80	13.80	-10.01	90.00	90.00	120.00	Н	SrAl ₂ Si ₄ O ₁₂ -6H ₂ O
		•	•		•	.•	Goos	secreel	kiteG	00			
Goosecreekite	35- 469	i	4.53_{π}	7.196	5.59 ₅	7.52	17.56	7.35	90.00	105.71	90.00	M	$C_{2}Al_{2}Si_{6}O_{10} \circ 5H_{2}O$.
					•		He	ulandi	ite—HI	U			
Clicoptilolite	39-1383	i	8.95 _x	3.968	3.986	17.67	17.91	7.41		116.37	90.00	M	KNa ₂ Ca ₂ (Si ₂₉ Al ₇)O ₇₂ • 24H ₂ O
Clinoptilolite, (Na)	47-1870 44-1398	i i	8.95 _x 3.97 _x	7.914	2.97 ₃ 3.99 ₇	17.65 17.73	18.01 17.98	7.40 7.43		116.30 116.18	90.00 90.00	M	(Na,K,Ca) ₅ Al ₅ Si ₂₀ O ₇₂ • 18H ₂ O Cs _{5,E} K _{0,4} (Al ₇ Si ₂₀)O ₇₂ • 13H ₂ O
Clinoptilolite-(Cs) Heulandite	41-1357	i	8.96	2.979	3.987	17.74	17.89	7.43	90.00	116.45	90.00	M	Ca(Si ₇ Al ₂)O ₁₈ -6H ₂ O
Heulandite-Sr	24- 469	i	8.94 _x	2.808	7.951	17.72 7.46	17.86	7.46 15.90		116.37	90.00	M	(Ca,Sr)Al ₂ Si ₇ O ₁₈ -6H ₂ O
Zeolite R, (Sr)	17- 143		3.98 _x	5.12 ₈	2.978	7.46	18.00	15.90	90.00	91.50	90.00	M	SrAl ₂ Si ₇ O ₁₈ -6H ₂ O
								ITQ-4					4
Calcined ITQ-4 ITQ-4	49- 619 51-1380	Ç	10.9 _x 10.9 _x	9.12 ₁ 9.13 ₁	4.37 ₁ 3.73 ₁	18.65 18.67	13.50 13.49	7.63 7.63	90.00 90.00	101.98 101.97	90.00	M M	Si ₃₂ O ₆₄ SiO ₂
MCM-58	52- 113	_	4.35	10.9 _x	4.125	18.70	13.50	7.6D	90.00	101.90	90.00		C _{16.8} H ₂₄ Al ₂ K _{1.2} N _{1.2} Na _{1.2} O ₅₃ Si ₂₄ *xH ₂ O
								ITQ-7	ISV				:
ITQ-7	51-1379	*	12.61	9.079	11.56	12.84	12.84	25,20	90.00	90.00	90.00	T	SiO ₂
								ITQ-3	_ITE				
Calcined ITQ-3	49- 623	С	10.3 _x	9.819	8.805	20,62	9.72	19.62	90.00	90.00	90.00	0	Si ₈₄ O ₁₂₈
FTQ-3	51-1381	*	10.3 _x	9.819	8.807	20.61	9.73	19.62	90.00	90.00	90.00		SiO ₂
•						Na-	J (Be	irrer d	& White	e)—,//	BW		Sie40128 SiO2
Nepheline hydrate	10- 459	0	2.95 _z	4.079	4.677		<u> </u>		. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>,,</i>		x	Na ₂ Al ₂ Si ₂ O ₈ •0.5H ₂ O
Nepheline hydrate	10- 460	ō	3.40,	4.399	2.95,	8.20	7.50	5.22	90.00	90.00	90.00		Na ₂ Al ₂ Si ₂ O ₈ •H ₂ O
								ZK-5-	–KFI				
Unnamed zeolite	10- 7	0	13.3,	3.20 _x	3.04 _x	13.28	13.28	13.28	90.00	90.00	90.00		BaO-Al ₂ O ₃ -SiO ₂ -BaBr ₂ *H ₂ O NaAlSi ₃ O ₈ *xH ₂ O Na ₂ xAl ₂ rSi ₁ y ₂ O ₂ x ₂ *12.2H ₂ O Cas X ₁ x ₁ Al ₂ xSi ₁ y ₂ O ₁ y ₂ *10.10
Unnamed zeolite ZK-5	18-1198 37- 360	o	9.41 _x 13.4 _x	5.41s 9.50s	4.41s 7.50 ₂	18.67	18.67	18,67	90.00	90,00	90.00	C	NaAlSi3O8*xH2O Na2.85Al3.78Si7.92O24.26*12.2H2O
ZK-5	39- 220	C	5.90 _x	9.348	13.26	18.67	18.67	18.67	90.00	90.00	90.00	C	Csa,7K13,0Al22,6Si73,2O192
ZK-5	40- 338	*	3.20,	5.91 _x	4.407	18.67 18.68	18.67 18.68	18.67 18.68	90.00 90.00	90.00	90.00		H _{15.22} (NH ₄) _{4,71} (C9 ₂ 47Al _{22,40} Si _{72,60} O ₁₉₂ *xH ₂ O H _{17.46} (NH ₄) _{4,20} C _{31,03} Al _{22,79} Si _{73,21} O ₁₉₂ *xH ₂ O
ZK-5 ZK-5	40- 339 44- 101	*	9.37 _x 9.41 _x	3.21 ₇ 4.41 ₅	4.41 ₅ 5.41 ₅	18.68	18.68	18.68	90.00	90.00	90.00	Ċ	C ₆ H _{9.5} Al ₂ NNaO ₁₄ Si ₅ •xH ₂ O
ZK-5, (Na,Li) Zeolite P	41- 30 24-1432	i	9.40 _x 13.1 _x	4.20 ₉ 3.01 _x	5.447 3.19 ₉	18.88 18.59	18.88 18.59	18.88 18.59	90.00 90.00	90.00 90.00	90.00 90.00		Lio.52Na _{1.72} Al ₂ Si _{3.18} O _{10.38} *5.38H ₂ O Ba _{1.9} Al ₂ Si _{4.4} O _{12.8} Cl _{1.8} *2.3H ₂ O
Zeolite P	24-1433	i	3.07 _x	5.078	4.46	18.93	18.93	18.93	90.00	90.00	90.00		Ba _{1.8} Al ₂ Si _{4.4} O _{12.8} Cl _{1.5} *2.3H ₂ O Ba _{1.8} Al ₂ Si _{2.6} O _{9.2} Cl _{1.3} *0.9H ₂ O
Zeolite Q	24-1431 24-1434	i	18.3 _x 3.07 _x	3.19 _x 4.47 ₈	3.02 _x 3.87 ₆	18.63 18.94	18.53 18.94	18.63 18.94	90.00 90.00	90.00 90.00	90.00		Ba _{1.9} Al ₂ Si _{4.3} O _{12.7} Br _{1.6} °2H ₂ O Ba _{1.8} Al ₂ Si _{2.6} O _{0.1} Br _{1.5} °1.5H ₂ O
Zeolite Q'	24-1404	•	3.012	4.478	3.016	10.54	_		_		50.00	٠.	
							_		ite—L				CaAl ₂ Si ₄ O ₁₂ *4H ₂ O
Laumontite Laumontite	26-1047 45-1325		4.16 _x 9.48 _x	3.51 ₈ 3.51 ₅	9.50 ₆ 6.87 ₄	14.76 14.82	13.08 13.10	7.5 6 7.57	90.00 90.00	112.02 112.00	90.00 90.00		CaAl ₂ Si ₄ O ₁₂ *4H ₂ O Ca(Al ₂ Si ₄ O ₁₂)*4H ₂ O
								Y armin	-LEV				
Hydrogen Nu-3	45- 750	í	8.00	6.53 ₉	4.008	13.06	13.08	22.56	90.00		120.00	R	A) ₂ Si ₅₀ O ₁₀₃
Levyne	26-1381	0	4.08 _m	2.816	6.692	18.36	13.35	22.88	90.00	90.00		R	Cn3Al6.5Si11.5O36+18H2O
Levyne Levyne	46-1263 51- 51		4.08 _x 4.04 _x	8.15 ₉ 5.08 _x	10.3 ₇ 2.77 ₆	13.34 13.20	13.34 13.20	23.01 22,37	90.00 90.00	90.00	120.00	R	Ca26(Na,K)0,9Al6,6Si ₁ 1,5O ₃₆ *15H ₂ O C43,6H ₆ 7N ₆ Al6,4Si ₄ 8,6F _{0,8} O ₁₀₈ *xH ₂ O
Levyne	51- 52		7.98,	4.027	6.56 ₆	13.15	19,15	22.52	90.00	90.00			Al _{5.4} Si _{48.5} P _{0.8} O ₁₀₈
Nu-3 Nu-3	42- 20 46- 749		4.04 _a 4.00 _a	5.10a 5.05y	2.77 ₆ 4.19 ₆	13,23 13,04	13.23 13.04	22.29 22.59	90.00 90.00	90.00			C ₆₀ H ₁₀₂ N ₆ O ₁₀₈ Si ₆₄ Na _{0.68} Al ₂ Si ₄₇ O _{57.3} *(C ₈ H ₁₆ N) ₃
No-3	47- 705 47- 706		8.03 _a 4.01 _a	4.01 ₉ 5.07 ₈	6.58a 4.21s							X	H ₃ Na _{0.8} Al ₂ Si ₄₅ O _{94.8} K _{0.6} Al ₂ Si ₄₅ O _{94.8} *3(C ₈ H ₁₅ N)*15H ₂ O
Nu-3 Nu-3	47- 707	ŏ	4.01	4.60	5.116							x	(Li, Na)0,5A12Si45O04.8 • 3(C8H16N) • 15H2O
SAPO-35	47- 622		4.04,	5.06	4.186		10.00	02.00	00.00	00.00	120.00	X	Al _{0.07} Si _{0.07} P _{0.36} O ₂ •0.11C ₇ H ₁₃ N
SAPO-35 TYAPSO-35	47- 623 46- 853		8.04 _x 4.06 _x	6.53 ₉ 5,13 ₈	4.00 ₈ 4.27 ₅	13,30	13.30	23.00	90.00	90.00	120.00	R	Al _{0.61} Si _{0.07} P _{0.36} O ₂ C _{0.96} H _{1.92} Al _{0.60} N _{0.12} O ₂ P _{0.35} Si _{0.06} Ti _{0.19} =0.12[C ₇ H ₁₃ NCH ₂](Ti _{0.19}
Tiapso-35 Znapo-35	46- 854 52-1506		7.97 _z 4.04 _z	4.00 ₉ 5.10 ₈	6.46 ₅ 2.78 ₆	13.29	13.29	22.31	90.00	90.00	120.00	R	Al _{0,40} O ₂ P _{0,35} Si _{0,06} Ti _{0,19} AlZnP ₂ O ₈
200 O-00	02 1000	•		-1.20		12.00							
**	48.5546				4.00				e-LIO	-	100.00		(No Co V) (C; A) (O) (D) (C E)
Liottite	47-1742	*	3.71,	3.319	4.834	12.86	12.88	16.09	90.00	90.00	120.00	n	(Na,Ca,K) ₂₄ (Si,Al) ₃₆ O ₇₂ [SO ₄ ,Cl,F] ₁₀
									<u>LOS</u>				
Bystrite Losod	45-1373 31-1269		3.72 _x 6.43 _x		3.92 ₈ 3.72 ₈	12.85 12.91	12.85 12.91	10.70 10.54	90.00 90.00	90.00	120,00		Ca(Na,K) ₇ (Si ₅ Al ₅ O ₂₄ XS ₃ *) _{1.5} *H ₂ O Na ₁₂ Al ₂ Si ₁₂ O ₄₈ *xH ₂ O
Losod, (Na)	39- 221	C	6.45	3.30,	4.778	12.91	12.91	10.54	90,00	90.00	120.00	H	Na12Al12Si12O46+18H2O
Unnamed zeolite	49- 926	i	3.50 _x	4.22 ₈	3.627	11.53	11.53	9.29	90.00	90,00	120.00	н	Lig(HPO4)(BaPO4)6°H2O
							\underline{L}	ovdari	ite—LC	V			
Lovdarite	25-1302 39-1367		3.29 _x 6.73 _x		4.969	38.79 39.58	6.78 6.93	7.01 7.15	90.00	90.00			K ₂ Na ₆ Ba ₄ Si ₁₄ O ₃₅ •9H ₂ O K ₂ Na ₆ Ba ₄ Si ₁₄ O ₃₀ •9H ₂ O
Lovdarite	03-100	·	0.101	5.80 ₈	8.086	a3.98					50.00		
									pe A—l			_	
Kryptofix 222-AlPO4 Kryptofix 222-AlPO4	51- 76 51- 77		11.9 <u>.</u> 6.88 _x		3.98 ₈ 11.9 ₅	23.81 23.87	23.81 23.87	23.81 23.87	90.00 90.00	90.00) С	(Al ₁₂ P ₁₂ O ₄₈ XOH) ₂ (C ₁₈ H ₃₆ N ₂ O ₆)(H ₂ O) ₈ (Al ₁₂ P ₁₂ O ₄₈ XF) ₂ (C ₁₈ H ₃₈ N ₂ O ₆)(H ₂ O) ₈
Linde A	11- 589	•	12.2,	8.664	3.284	12.26	12.26	12.26	90.00	90.00	90.00	C	Cu ₅ (AlSiO ₄) ₁₂ •30H ₂ O Na ₅ (AlO ₂) ₅ (SiO ₂) ₁₅ •27H ₂ O
Lindo A, (Li) SAPO-42	14- 298 47- 628		12.1 _x 3.67 _x		3.24 ₇ 2.96 ₈	12.16	12.16	12.16	90.00	<i>5</i> 0.00	50.00	X	Na _{0.23} Al _{0.42} Si _{0.53} P _{0.04} O ₂ • 0.3C ₄ H ₁₂ N • 0.74H ₂ O
Unnamed zeolite	13- 147		4.05		12.18	12.13	12.13	12.13	90.00	90.00			C ₂ H ₉ NO+Al ₂ O ₂ +xSiO ₂ +zH ₂ O
ZK-21 ZK-4	27-1400 44- 100	0	12.2 _x 12.0 _x	9.58	2.95 ₈ 3.66 ₇	12.20	12.20	12.20	90.00	90.00		х	NaAISIPO4*xH2O Nao.6H16.aAl2Si6O14.3NL4C1.4*xH2O
Zeolite 4A Zeolite 4A, (Ag)	43- 143	S C	12.3, 12.3,	8.697	5.50 ₃ 2.62 ₁	·24.59 12.31	24.59 12.31	24.59 12.81	90.00 90.00	90.00		C	N892A192Si100O344 Ag7,cNa4,4Si12A112O48
Zeolite 4A, (Co)	43- 14		12.2	-	-	12.31	12.31	12,17	90.00	90.00			C ₈ H ₈ Al ₁₂ Co ₄ Na ₄ O ₄₈ Si ₁₂
Zeolite 5A Zeolite 5A	19-118: 19-145-	3	1.76 _x 4.10 _a	1.37,	2.650	12.42	12.42		90.00 90.00	90.00	90.00	C	NaCaAl ₃ Si ₃ O ₁₂ NaCaAl ₃ Si ₃ O ₁₂ l _{2.6}
Zeolite A (Co,CS2)	46- 564	ı c	12.1,	8.594	7.014	12.29 12.16		12.15	90.00	90.00	90.00	Ç	(CS ₂) ₄ Co ₄ Na ₄ Al ₁₂ Si ₁₂ O ₄₈
Zeolite A (Pb)	46- 56	s c	12.3	2.991	4.101	12.31	12.31	12.81	90.00	90.00	90.00	С	(Pb ₉ O(OH) ₄)Al ₁₂ Si ₁₂ O ₄₈ •H ₂ O

了一下一下,一下一下了,不是我的我们的人,我们就有什么一个人,我们就是我们的人,我们就是我们的人,我们们是我们的人,我们就是我们的人,我们就是我们的人,我们就是

Zeolite Structure Type Name—Code

::.						_	eonte	Struc	ture I	ype N	ame-		_	
:	Zeolite Name	PDF# Q	M		tronge flection		Cell a	Param b	eters c	Cel a	Angli β			Chemical Formula
	Zeolita A, (Ag) Zeolita A, (Cd) Zeolita A, (Co,Br) Zeolita A, (Ca,Ga) Zeolita A, (Ca,Ga)	43- 145 (45- 178 (45- 188 (c c,	12.3g 12.3g 4.04g 4.33g 12.2g	5.50 ₁ 3.24 ₇ 3.40 ₈	2.98g 4.10 ₁ 4.95 ₃ 3.69 ₉ 8.66 ₅	24.55 12.29 12.12 12.24 12.24	24.65 12.29 12.12 12.24 12.24	24.55 12.29 12.12 12.24 12.24	90.00 90.00 90.00 90.00 90.00	90.00 90.00 90.00 90.00 90.00	90.00 90.00 90.00 90.00	000	AlggHzsAg7gSigsOzs4*xH2O CdgSi3sAl3cO4*2H2O (CoBr3kNac(Si3sAl3cO4s)(Br2)3 C812sAl32Si3rOa C812sAl3Si3rOa
	Zeolite A, (Cs.Ca) Zeolite A, (K,Zn) Zeolite A, (K,Zn) Zeolite A, (Li) Zeolite A, (Np)	45- 190 · 6 43- 147 · 6 43- 148 · 6 38- 242 · 6		3.68, 12.3,	3.39 _x 8.71 ₇ 8.54 ₃ 8.51 ₇ 3.01 _x	4.32 ₉ 6.51 ₂ 6.40 ₂ 3.63 ₅ 1.64 ₈	12.21 12.32 12.07 12.04 12.39	12.21 12.32 12.07 12.04 12.39	12.21 12.32 12.07 12.04 12.39	90.00 ° 90.00 90.00 90.00 90.00	90.00 90.00 90.00 90.00 90.00	90.00 90.00 90.00 90.00 90.00	C C	C8 _{11.5} C8 _{0.6} Ali ₂ Sl ₁₇ O ₄₈ K _{11.5} Si ₁₂ Al ₁₇ O ₄₈ Za ₂ K ₂ Ali ₂ Sl ₁₇ O ₄₈ *3.5H ₂ O (Li, Na) ₂ Al ₂ Sl ₁₅ Si ₇ *2H ₂ O 12Na*12(AlO ₂ ,SiO ₂)*9.3NaNO ₃ *8.7H ₂ O
	Zoolite A. (Na) Zeolite A. (Na) Zeolite A. (Na) Zeolite A. (Rb.Ag) Zeolite A. (Rb.Ag)	39- 222 39- 223 45- 185 45- 186	C C C	12.3 _g 12.3 _g 12.3 _g 3.70 _g 3.70 _g	8.68 ₆ 12.3 ₆ 2.97 ₈	2.99 ₈ 2.98 ₆ 7.09 ₆ 2.98 ₈ 3.40 ₆	12.32 24.61 24.56 12.27 12.28	12.32 24.61 24.56 12.27 12.26	12.32 24.61 24.56 12.27 12.26	90.00 90.00 90.00 90.00	90.00 90.00 90.00 90.00 90.00	90.00 90.00 90.00 90.00 90.00	00000 0	NagAl ₂ Si _{1,2} SO _{7,7} +5.1H ₂ O NagAl ₂ Si ₂ O ₂₄ , 226H ₂ O NagAl ₂ Si ₂ O ₂₄ , Rb _{11,75} Ag _{2,22} Al ₁ Si ₁₂ O ₄₈ Rb _{11,75} Ag _{2,22} Al ₁ Si ₁₂ O ₄₈ Rb _{11,85} Ag _{3,77} Al ₁₂ Si ₁₂ O ₄₈
	Zeolite A. (Rb,Ag) Zéolite A. (Sr) Zeolite A. (Tl) Zeolite P-A	38- 243 38- 244	C * * i	2.99 _x 2.99 _x 4.36 _x 12.2 _x	3.72 ₇ 12.4 ₉ 2.52 ₆ 2.95 ₉	12.3 ₆ 3.29 ₇ 2.76 ₆ 8.60 ₉	12.34 12.32 12.33 12.26	12.34 12.32 12.33 12.26	12.34 12.32 12.33 12.26	90.00 90.00 90.00 90.00	90.00 90.00 90.00	90.00 90.00 90.00	C	Rb _{11,86} Ag _{6,0} 5Al ₁₂ Si ₁₂ O ₄₉ (Sr,Na;)Al ₂ Si _{1,85} O _{7,7} *xH ₂ O Th ₂ Al ₂ Si _{1,85} O _{7,7} *xH ₂ O Na ₂ O*Al ₂ O ₃ *1,71SiO ₂ *0.24P ₂ O ₃ *4.32H ₂ O
						•		Line	de Typ	e LL'	<u>rr</u>			
	ECR-2 Lindo L Lindo L Portinlite Zeolita L	39- 224 38- 395 43- 47	i C O	15.9 _x 16.0 _x 16.9 _x 16.0 _x 15.8 _x	3.92 ₇ 3.19 ₄ 2.91 ₄ 4.62 _x 3.91 ₄	3.18 ₇ 3.92 ₄ 3.19 ₃ 3.20 ₉ 4.67 ₃	18.39 18.40 18.40 18.49	18.39 18.40 18.40 18.49	7.65 7.52 7.52 7.51	90.00 90.00 90.00 90.00	90.00	120.00 120.00 120.00 120.00	H H H K	KarahaSia, reO1, 13 KanahaSia, O2, rota, O KeNahaSia, rota, rota, o KanadaSia, rota, rota, o KanadaA1, rota, rota, o Kao, rota, rota, rota, o Kao, rota, rot
	Zeolito L Zeolite L Zeolite L Zeolite P-L	44-1393	O C i	15.8 _x 16.1 _x 16.2 _x 16.0 _x	3.17 ₅ 6.08 ₁ 3.96 ₇ 3.22 ₃	3.91 ₄ 3.95 ₁ 4.65 ₆ 4.65 ₃	18.58 18.61 18.75	18.58 18.61 18.75	7.49 7.57 15.03	90.00 90.00 90.00	90.00	120.00 120.00 120.00	H H H	1.01K ₂ O=0.9Na ₂ O=4l ₂ O ₃ =6.2SiO ₇ =5.0H ₂ O K ₁₀ Ga ₂ Si ₂₇ O ₇₂ K _{2.05} Ga ₂ Si _{4.2} SO _{16.53} 0.69K ₂ O=Al ₂ O ₃ =1.59SiO ₂ =0.38P ₂ O ₅ =2.53H ₂ O
										e N—L				
	NaZ-21 Unnamed zeolite Unnamed zeolite Z-21 Zeolite N	26-1987 28-1923 27-1405 26-1988	CiOii	11.1 _x 6.51 _x 6.54 _x 6.51 _x 6.57 _x	21.36 4.049 4.058 13.09 4.069	9.245 3.709 3.718 3.708 3.728	36.95 36.81 13.08 36.70 37.22 12.48	36.95 38.81 13.08 36.70 87.22 12.48	36.95 35.81 21.56 36.70 37.22 16.00	90.00 90.00 90.00 90.00 90.00	90.00 90.00 90.00 90.00 90.00	90.00 90.00 90.00 90.00 90.00	COFCCF	AINASiO,*1.03H ₅ O C _{0.14} H _{0.472} Al ₂ N _{0.02} N ₀ P ₀ O _{0.02} Si ₂ C ₄ H ₁₂ NN ₀ *Al ₂ Si ₂ O _{7*} 3H ₂ O N ₈ A ₄ J ₂ Si ₄ O ₄ *2**2H ₃ O C _{0.06} H _{0.24} Al ₂ N _{0.06} N _{0.16} O _{7.86} Si ₂ *2.8H ₂ O Sr-AA-Si-O
ं	Zeolite N, (Sr)	17- 755	0	4.56 _x	2.94,	2,13 _z	12.40		1azzite			50.00	٠.	5.1.5.0
	ECR-1 Mazzito Omega	38- 426 23-1894	0	3.17 _x 3.19 _x 9.07 _x	3.50 ₈ 2.94 ₁ 3.78 ₉	9.10 ₈ 3.82 _r 5.94 ₈	18.15 18.39 18.15	26.31 18.39 18.15	7.31 7.65 7.59	90.00 90.00 90.00	90.00 90.00 90.00	90.00 120.00 120.00	о н н	Na ₂ O-Al ₇ O ₃ -SiO ₂ K ₂ CaMg ₂ (Si,Al) ₃₆ O ₇₂ *28H ₂ O C ₄ H ₁₂ Al ₂ NNaO ₆ Si*H ₂ O
# . : # . :	Omega ZBM-4 ZSM-4	44-, 11 34-1830 42- 309	0	9.09 _x 9.18 _x 3.53 _x	3.79 ₇ 3.82 ₇ 3.16 ₂	3.52 ₆ 3.54 ₆ 2.92 ₉	18.31	18.81	7.68	90.00	90.00	120.00	H X	0.72(CH ₂) ₆ N=0.7 <u>1</u> Ne ₂ O=Al ₂ O ₃ =7.3SiO ₂ =6.3H ₂ O C _{2.34} H _{4,73} Al ₂ N _{0.66} Ne _{1.84} O _{17.66} Sl _{6.43} =6.66H ₂ O (C ₆ H ₁₂ N ₂ (Ne ₂ O) _{2,6} (Al ₂ O ₃) _{5,3} (SiO ₂) ₂₂ =6H ₂ O
	(사) (사)							2	ZSM-1	8—MEI				
	ZSM-18 ZSM-18	43- 57 52- 144	*	11.5 ₂ 11.4 ₂	4.17 ₈ 7.92 ₂	4.13 ₇ 6.08 ₁	13.18	13.18	15.85	90.00	90.00	120.00	H	Al ₂ Na _{0.18} O ₂₄ ₂₂ Si _{10.5} °xH ₂ O Si ₂₄ O ₆₈
7			0		5 PC.	10.16	20.10	20.10	ZSM-1. 13.41	1—MEL 90.00	90.00	90.00	т	TiO2-SiO2
	Eilicalite-2, (Ti) TASO-48 TASO-48 TayK-1	43- 55 46- 862 46- 863 42- 12 42- 13	000	11.2 _x 3.88 _x 11.3 _x 8.87 _x	3.85 ₈ 11.3 ₇ 3.85 ₇ 11.2 ₉	3.75 ₅ 10.2 ₆ 10.1 ₉ 10.0 ₉	20.12 20.03	20.12 20.03	13.41 13.40	90.00	90.00	90.00	XXT	((C ₄ H _B) ₄ N) ₂ O-Al ₂ O ₃ -Na ₂ O-TiO ₂ -SiO ₂ -H ₂ O Na ₀ nssAl ₀ O ₁ Ti ₀ nsSiO ₀ an ₂ O ₃ C ₁₈ H ₃ Br.N-Na ₂ O-Al ₂ O ₃ -SiO ₂ -H ₂ O Na ₁ ,22Al ₂ Si ₆ O _{129,78} ×AH ₂ O
	TaVK-I Unnamed zeolite 25M-11 25M-11	42- 14 38- 246 38- 247	i 0 0	3.86 _x 3.85 _x 3.86 _x 3.87 _x	3.82 ₉ 3.73 ₄ 9.36 ₆	3.71 ₉ 11.2 ₃ 3.74 ₄	20.00	20.00	13.39	90.00	90.00		X X X	C16H36BrN·Na2O-B2O3-SiO2-H2O Na1,04A12Si49O9352 Na2-A12-Si18-O160*AH2O
	ZSM-11 ZSM-11 ZSM-11, (H)	38- 248 42- 22 38- 195	0	3.86 _x 11.1 _x 3.86 _x	11.9 ₈ 10.0 ₅ 11.3 ₈	10.1 ₅ 3.85 ₅ 10.1 ₅	20.07	20.07	18.41	90.00	90.00	90.00	T X	Na-Al ₂ -Si ₇₈ -O Si ₉₆ O ₁₉₂ H-Al ₂ O ₃ -SiO ₂
	A 100.						00.00			ogite—	90.00	90.00	Ŧ	C2H17O6 • Si46O52
	Melanophlogite	25- 7	1	5.99 _x	3.58	5.477	25.79	26.79 M	13.40 erlino	90.00 iteME		50.00	٠	O3111106-mt6081
	Merlinoite Unnamed zeolite Zeolite K-M Zeolite P-W Zeolite Rb-M	29- 989 52- 143 30- 902 38- 320 30-1043	i C O	3.18 _x 4.21 _x 3.25 _x 3.19 _x 3.19 _x	7.129 2.778 3.19x 3.257 5.078	7.089 4.496 2.97 _x 7.206 4.826	14.12 14.19 10.07 24.17 10.25	14.23 14.19 14.22 24.17 14.30	9.95 9.23 14.22 10.03 14.30	90.00 80.00 90.00 90.00 90.00	90.00 90.00 90.00 90.00 90.00	90.00 90.00 90.00	0 7 0 7 0	KgCag(Al ₂ Si ₂₃ O ₅₄)*24H ₂ O BagAl _{10,87} Cl ₂ Si _{21,33} O ₅₄ *12H ₂ O KgAl ₂ Si ₃ O ₁₀ *3H ₂ O S.54K ₂ O*4J ₂ O ₂ *1.73SiO ₂ *0.37P ₂ O ₅ *2.99H ₂ O Rb-Al-SiO ₂ -H ₂ O
									ZSM-	5—MFI				
	AMS-1B AMS-1B AMS-1Cr AMS-1Cr AMS-1Cr	42- 382 42- 383 43- 37 47- 766 47- 767	00000	3.84 _x 3.84 _x 11.0 _x 11.0 _x 3.80 _x	3.72 ₆ 3.72 ₆ 3.85 ₂ 3.85 ₉ 11.0 ₈	11.44 11.25 10.08 10.07 10.08							X X X X	B ₂ Si ₂ Si ₂ ; B ₂ O ₂ Si ₀ 2; C ₁ O ₂ Si ₀ 2:H ₂ O N ₀ -C ₁ -Si ₁ O-C-H-N (NH ₄)-C ₁ -Si ₂ O
	Natural ZSM-5 Nu-5 Nu-5 Silicalito	50-1665 42- 119 42- 120 44- 696	i 0 0 i	3.85 _x 3.86 _x 3.86 _x 11.1 _x	3.75 _x 11.1 ₇ 11.1 ₈ 10.0 ₆	11.2 ₈ 3.82 ₇ 8.83 ₇ 3.82 ₃	20.22			90.00	90.00	90.00	X O	Ko.11Nn2.76C83.74Mgo.qrA111.csSis4.91O189*80HgO C21.8T84.Q1181Nn3Q0h31KA12Q3KSiQ7h88*24.6HgO (Nn2Q0h0.gr(Al2Q3KSiQ2)nr=0.97HgO SiQ2
	Silicalite-1, (DIPA,F) Silicalite-1, (TPA,F)	45- 739 45- 737	i i	11.1 ₂	3.84 ₂ 9.96 ₉	10.0 ₉ 3.83 ₉	20.05 20.04	19.89 19.93	13.38	90.00 90.00	90.00	90.00	0	C28.6H76.8F4.8N4.8O102Sipc.6.5H2O SipcO102[(C3H7)4N]4F4
	Silicalite-1, (TRIPA,F) Silicate E TSZ TSZ	45- 738 47- 715 43- 313 44- 115	i 0 i 0	11.1, 3.83, 3.86, 3.86,	3.84, 11.1s 11.2s 11.27	9.99 ₉ 3.72 ₅ 10.1 ₈ 3.82 ₇	20.05	19.89		90.00 90.51	90.00		х	Si ₀₆ O ₁₉₂ ((C ₃ H ₇) ₃ NH) ₄ F ₄ *8H ₂ O SiO ₇ N ₀₂ Al ₂ Si ₃₆ O ₅₆ *12H ₂ O N ₀₂ 03Al ₂ Si ₃₄ ,O ₇₂ 21*11.2H ₂ O
· ·	TsVK-II TsVK-II	42- 16 42- 17	0	11.2 ₁ 11.1 ₂	3.86 _x 3.86 _x	3.82 ₂ 3.82 ₃	20.08 20.11			90.00 90.00	90.00		0	C ₈ H ₂₀ BrN-No ₂ O-Al ₂ O ₃ -SiO ₂ -H ₂ O No _{1.6} Al ₂ Si ₁₀₃ O _{209.9} °xH ₂ O
	USC-4 Unnamed zeolite	47- 718 42- 15	Q į	4.06 _x 3.84 _x	3.337	10.9 ₆ 3.71 _x	20.02	19.92	13.37	90.00 90.00	90.00			SiO ₂ NaB ₂ Si _{B2} O _{57,5} *xH ₂ O Na ₂ 0Al ₂ ,Si _{94,1} O ₁₀₂
· •	Unnamed zeolite Unnamed zeolite	48- 136 49- 78	i *	11.2 ₃ 3.72 ₂	3.85,	9.97 ₃	20.11 19.86	20.11	13.40	90.00	90.56	8 90.00	M	96SiO ₂ *xlCl 96SiO ₂ *xlBr
	Unnamed zeolite Unnamed zeolite Unnamed zeolite ZSM-6	49- 79 49- 80 49- 81 37- 390	* * 0	9.86 _x 3.85 _x 3.85 _x 3.85 _x	3.72 ₇ 3.71 ₆ 3.71 ₈ 11.1 ₈	3.82 ₄ 3.82 ₃ 3.82 ₃ 10.0 ₈	19.87 19.89 19.87	20.08	13.37	90.00 90.00 90.00	90.50	90.00	M	965102*xlz Si ₉₀ O ₁₀₂ (Br ₂) _z Na _{1.76} Al ₃ Si _{31.1} O _{66.1}

POPP ON						Z	eolite	Stru	cture 1	rype N	ame-			
Column		DDE# 0												
Section Column	Zeolite Name	PDF# C	3 IVI	Re	nection	15	<u>a</u>	<u>D</u>		α	<u>. Р</u>	<u> </u>	Jys.	
256.6 1.0 1.1 1.0 1.5 1.				3.85 _E	3.83 _g	3.72g								(C ₃ H ₇) ₁₆ N ₄ Si ₉₆ O ₁₉₂ (OH) ₄
State Column		42- 23.	Č											HangAlog2Siss.csO192
1	20111-0	43- 321	۰,	3.842	8.746	11.35								
## 12 11 11 12 13 13 11 13 13	•									00 00°		00.00		· · · · · · · · · · · · · · · · · · ·
## 1500 1.1 1.														Al ₂ O ₃ • 54SiO ₂
State 1						3.853	20,08	19.92	13.40	90,00	90,00			Cs0.4(Alo.sSi23.1O48)
Section Sect	ZSM-5						20.08	19.96	13.48 -	90.00	90.00	90.00		
200.0 1.				-			00.10	10.00	12.49	90.00	90.00	90.00		
\$\frac{2525}{2525} \frac{1}{10}				3.85 _x		3.725	20.10	10.00	10.40	50.00		••••	X	Na1.85H3.6(FcO2)5.45(SiO2)90.56
## 250-54 (17)	ZSM-5, (H)	37- 359		3.85 _x										
The color of the							20.11	19.93	.13.43	90.00	90.00	90.00		
Table			•							90.00	90.00			Na _{3.22} Al _{5.48} Si _{20.52} O _{190.9}
		48- 134		11.2_{x}	3.85g	3.83 ₆	20.08	19.94	13.41	90.00				Nag.gAl2.3Sig3.7O1g2*x(CgH20N)*xH2O
ZSM-57-MFS							20.12	19.93	13.41	90.00	90.00	80.00		
More March	Depite Hizona		_					_		mó				
Montecommunis								_					_	·
Montesemmails							7.45	14.17	18.77	90.00	90,00	90.00		
Meritanismin Marie	ZSM-57, enleaded	41- 000	•	3.701	11.08	0.406								
## CR: 1								Mont	esomm	aite—l				
CP-3	Montesommaite	46-1351	i	3.30_x	3.13 ₂	6.59 ₈	10.10	10.10	17.31	90.00	90.00	90.00	0	(K,Na) ₂ Al ₂ Si ₂₃ O ₆₄ • 10H ₂ O
CP-3								M.	andoni:	to_MO	R			
Extracrelation 6		.= 000	_				10.16				_	90.00	0	No.C. AlaCa-SiCa
Microsolitical Control 1			.0	3.172										
Mortesiate		 6- 239 	i	3.48 _x	3.22 _x .	9.109	18.16	20.45	7.54	90.00	90.00			(Ca,Na ₂ ,K ₂)A) ₂ Si ₁₀ O ₂₄ • 7H ₂ O
Section Color Co	Mordenite													Nag-Ca,KaJAJaS110U24*7H2U Nag-Ga-Sig-Go-s-C-0.21C+cH44N2O
Mericalist, Col														
Merdentin, (Co) 44-191 C 3.47, 1.56, 3.59, 18.19 20.47 7.81 20.00			U				11.51	20.32	1.44				X	CaAl ₂ Si ₁₀ O ₂₄ • 7H ₂ O
Mordenian, (Nich.) 31-1266 0 3-46, 600,	Mordenite, (Cs)	44-1391		3.47 _x	13.6 _x									
Membrasite (Na, Li)							18,10	20.32	7.46	90.00	50.00	50.00		
Membrais (188)													Х.	0.345Li ₂ O+0.36Na ₂ O+Al ₂ O ₃ +10.2SiO ₂ +6.6H ₂ O
TAGO 18	Mordenite, (Rb)	44-1387	Ċ	13.6 ₂	3.454	8.983	18.13	20,41	7.46	90.00	90.00	90.00		
Zeolite Al-mordanical														
Part	Zeolite Al-mordenite				3.978	9.058	18.07	20.28	7.49	90,00	90.00	90.00	0	Nn2Al2Si13.3O29.6+a
CF-3			*			3.225								Na _{1.5} Ga ₂ Si ₁₉ O ₄₂₅
Defectable 15	Zeolite M, (Sr)	17- 138		3.48 _x	3.23,	2.92	18.19	20.50	7.52	90.00	90.00	90.00	U	PLYING INON LUNG
Dedecasis-3C						•		2	ZSM-35	$-MT\lambda$	Ī			
Dedecasis 32 27 C 273 5.85 3.28 13.68 13.69 13.64 13.04 13.04 13.04 13.05 13.04 13.05 13.04 13.05	CF-3	39- 155	٥	11.2,	3.695	4.313		-			-			C _{6.04} H _{18.12} N _{2.02} • 0.64Na ₂ O • Al ₂ O ₃ • 87SiO ₂ • 3.97H ₂ O
25M-39	Dodecasil-3C	39- 227	C	3.73.	5.85,	3.28								(N ₂ ,A ₇ ,CH ₄) ₂ [N(CH ₂) ₃ ,CO ₂] ₃ Si ₁₃₆ O ₂₇₂
25M.439														$C_8H_24N_2O-SiO_2-(NH_4)_2O-La_2O_3-H_2O$
Test												90.00	T	CH ₅ N-H-SiO ₂ -H ₂ O
SSE-23						3.278			***	00.00	00.00	00.00		
Sin_1	ZSM-39	47- 720	0	5.82,	5.56g	3.729	19.40	19.40	19.40	90.00	90.00	30.00	C	3102
\$\$2.33								:	ZSM-2	3 <i>—MT1</i>	r			
\$32.33	ISI-4	43- 15	0	10.9,	4.51 _x	3.69 _x		-			-			Nn1.sAl2Si74O151.s
Color Colo	SSZ-32				3.73 _x									
ZSM-22 46- 670 C 10-9, 3.889 4.519 CZH-5 47. 721 O 4.24, 4.07f, 11.89 CZH-5 47. 721 O 4.24, 4.07f, 11.89 ZSM-12—MTW ZSM-12—MTW CZH-5 47. 721 O 4.24, 4.07f, 3.644 TASO-49 46- 684 O 4.21, 3.87f, 3.884, 12.60 TASO-49 46- 684 O 4.21, 3.87f, 3.884, 12.60 ZSM-12 47. 708 O 4.24, 3.87f, 3.884, 12.60 ZSM-12 47. 708 O 4.24, 3.87f, 3.884, 12.60 ZSM-12 47. 708 O 4.24, 3.87f, 3.884, 12.60 MCM-22—MWW MCM-24-08-09-09-09-09-09-09-09-09-09-09-09-09-09-			0										X	Al ₂ Si _{60.6} O _{126.33}
CZH-5			C			4.47g	5.01	21.52	11.13	90.00	90.00	90.00		
CZH-5 48-864 O 4.34, 3.76 13.18 TASO-49 48-864 O 4.34, 3.876 13.18 ZSM-12 44-88 O 4.24, 3.876 3.894 ZSM-12 44-88 O 4.24, 3.876 3.894 ZSM-12 44-88 O 4.24, 3.876 3.894 ZSM-12 48-7-708 O 4.26, 3.876 ZSM-12 MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22 48-75 O 3.43, 12.5, 8.855 SSZ-25 50-1679 i 12.3, 11.17 ZSZ-25 50-1679 i 12.3, 8.817 ZSZ-25 50-1679 i 12.3, 8.817 ZSZ-26 49-650 i 12.3, 8.873 ZSZ-27 SCH-1080 C 13-1589 O 12.2, 8.873 ZCH-1080 C 12-180 ZCH-1080 C 12-180 MCM-22 MCM-22—MWW X Al-0,*21SiO, X K[Al,Bi ₁₋₀ O) X Al-0,*SiO ₂ Ci ₃ H ₂₀ NOH X K[Al,Bi ₁₋₀ O)	Zeolite KZ-1	37- 411	0	10.9 _x	3.889	4.510							x	Al _{0.296} Na _{0.012} Si _{18.9} O _{32.25}
CZH-5 48-864 O 4.34, 3.76 13.18 TASO-49 48-864 O 4.34, 3.876 13.18 ZSM-12 44-88 O 4.24, 3.876 3.894 ZSM-12 44-88 O 4.24, 3.876 3.894 ZSM-12 44-88 O 4.24, 3.876 3.894 ZSM-12 48-7-708 O 4.26, 3.876 ZSM-12 MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22—MWW MCM-22 48-75 O 3.43, 12.5, 8.855 SSZ-25 50-1679 i 12.3, 11.17 ZSZ-25 50-1679 i 12.3, 8.817 ZSZ-25 50-1679 i 12.3, 8.817 ZSZ-26 49-650 i 12.3, 8.873 ZSZ-27 SCH-1080 C 13-1589 O 12.2, 8.873 ZCH-1080 C 12-180 ZCH-1080 C 12-180 MCM-22 MCM-22—MWW X Al-0,*21SiO, X K[Al,Bi ₁₋₀ O) X Al-0,*SiO ₂ Ci ₃ H ₂₀ NOH X K[Al,Bi ₁₋₀ O)									ZSM-12	2—MTV	V			
TASO-49	рап в	47. 791	0	4 24	4.07_	11.8		=			-		x	Nag 40Al2Sig4 2O123 * 2,76C5H14NO * xH2O
ZSM-12		48- 864	0	4.31.	3.879	12.1 ₈							X	$((C_2H_5)_4N)_2O-Al_2O_3-TiO_2-Na_2O-SiO_2-H_2O$
MCM-22	ZSM-12				3.877		12.60	11.10	24.40	90.00	108.00	90.00		Nal.18A12S177.4O188.28 2CuHuaNaO+0.18Na2O+A12Ox+78SiO2
MCM-22				4.26	3.886		24.90	5.00	12.15	90.00	107.70	90.00		Na-Al-Si-O-C ₁₇ H ₂₄ N ₄ -H ₂ O
MCM-22									ACTA O	o MUZ	DZ7			
SSZ-25			_					21	10m-2	2-111 11	<u>" </u>		v	ALO015:0-
SSZ-25, calcined 51-1598 i 12.3, 11.17					12.5								X	Al ₂ O ₂ -SiO ₂ -C ₁₃ H ₂₆ NOH
Ca-Tetranatrolite	SSZ-25	50-1679	i	12.3 _x	11.17	8.808	14.10	14.10	25,20	90.00	90.00	120.00		K(SiAl)O ₂
Ca-Tetronatrolite	SSZ-25, colcined						14.11	14.11	24.88	90.00	90.00	120.00		H2 37 Na3.10(Alo.25B5.11Siss.52)O144
Ca-Tetranatrolite 42-1381 i 2.90, 5.90, 4.41e 13.25 13.25 6.60 90.00 90.00 90.00 T (Na, Ca)r(Si,Al) ₀ O ₁₀ -2HeO Gonardite 10-473 0 2.92, 5.93e 4.44e 13.38 13.38 6.61 90.00 90.00 90.00 T (Ca,Na) ₁ Si,Al) ₀ O ₁₀ -2HeO Gonardite 42-1380 i 2.90, 6.90, 4.41e 13.29 13.29 6.59 90.00 90.00 90.00 T (Ca,Na) ₁ Si,Al) ₀ O ₁₀ -3HrO (Ca,Na) ₁ Si,Al) ₁ O ₁₀ -3HrO (Ca,Na) ₁ Si,A	Deona mon-as		•											
Compardite 10-473 O 2.92, 5.93, 4.44 13.38 13.38 6.51 90.00 90.00 90.00 T Ca,Na,Si&Al,Ope-7H4O								_						
Commardite 42-1380 1 2.90, 6.90, 4.41, 13.29 13.29 13.29 3.29, 6.59 90.00 90.00 90.00 7 (Ca,Na) ₂ (Si,Al) ₂ O ₁₉₋₃ H ₂ O MagCa ₂ Al ₂ Si ₃ O ₂ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₂ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₂ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₂ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Al ₂ Si ₃ O ₃ · 8H ₂ O MagCa ₂ Si ₃ O ₃ · MagCa ₃ Si ₃ O ₃ O ₃ · MagCa ₃ Si ₃ O ₃ O ₃ · MagCa ₃ Si ₃ O ₃ O ₃ · MagCa ₃ Si ₃ O ₃ O ₃ · MagCa ₃ Al ₃ Si ₃ O				2.90 _x	5.90p									
Connardite 45-1324 C 2.88 ₅ 5.92 ₅ 3.21 ₅ 13.21 13.21 6.62 90.00 90.00 90.00 90.00 7 (Na,Ca) ₂ (Si,Al) ₂ O ₁₀ -8H ₂ O Na ₂ Ca ₂ AlcSi ₃ O ₂₀ -8H ₂ O Na ₂ Ca ₂ AlcSi ₃ O ₂₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₂₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₂₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₃₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₃₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₃₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₃₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₃₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₃₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₃₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₃₀ -8H ₂ O Na ₂ Ca ₃ AlcSi ₃ O ₃₀ Na ₂ Ca ₃ AlcSi ₃ O ₃ O ₃ Na ₂ Ca ₃ AlcSi ₃ O ₃ O ₃ Na ₂ Ca ₃ AlcSi ₃ O ₃ O ₃ Na ₂ Ca ₃ AlcSi ₃ O				2.92 ₄		4.416								(Ca,Na)z(Si,Al)zO ₁₀ +3H ₂ O
NAT	Gonnardite	45-1324	Ċ	2.88 _x	5.925	3.215	13.21	13.21	6.62	90.00	90.00	90.00	T	(Na,Ca) ₂ (Si,Al) ₅ O ₁₀ =3H ₂ O
Natrolite 45-1413 + 5.89, 2.87, 6.544 18.3D 18.66 5.59 90.00 90.00 90.00 90.00 O No. NajskjsijOn. 2149 O N	Mesolite			2.89										
Natrolite, (Ga) 33-1243 0 5.665, 3.00, 5.865, Natrolite, (Ga) 34-683 3.832, 2.98x 2.507, Natrolite, (K) 34-837, 6.692, 2.978, 3.003, 19.34 19.81 6.50 90.00 90.00 90.00 0 KgAlaSisOne*PH4O Paranatrolite 35-458 2.94x 5.925 4.444 19.07 19.13 6.58 90.00 90.00 90.00 0 NagAlaSisOne*PH4O Paranatrolite 42-1386 0 6.75x 2.957, 2.905, 18.93 19.21 6.59 90.00 90.00 90.00 NagAlaSisOne*3H4O Paranatrolite 42-1355 i 6.63x 4.747 5.676, 18.48 18.6 6.59 90.00 90.00 90.00 NagAlaSisOne*3H4O Scolectite 41-1355 i 2.87x 6.555 4.39x 13.10 13.10 6.84 90.00 90.00 NagAlaSisOne*3H4O Tetranatrolite 33-1205 i 2.87x 6.555 4.39x 13.10 13.10 6.84 90.00 90.00 NagAlaSisOne*2H4O MU-87—NES Gottardlite 49-1814 i 11.3x 4.37s 3.28x 13.70 25.21 22.66 90.00 90.00 90.00 NagMg2CasAlaSisIrOzne*93HyO Gottardlite 49-1831 x 11.3x 3.784 4.37z 13.70 25.21 22.66 90.00 90.00 90.00 NagMg2CasAlaSisIrOzne*93HyO NagMg2CasAlaSisIrOzne*93HyO NagMg2CasAlaSisIrOzne*93HyO NagMg2CasAlaSisIrOzne*93HyO NagMg2CasAlaSisIrOzne*93HyO NagMg2CasAlaSisIrOzne*93HyO NagMg2CasAlaSisIrOzne*93HyO NagMg2CasAlaSisIrOzne*93HyO NagMg3CasAlaSisIrOzne*93HyO NagMg3CasAlaSisIrOzne*94HyO NagMg3Cas					6.58 ₆									
Natrolite (IGa) 34- 883 3.83x 2.98x 2.607 Natrolite (IG) 38- 337 6.92x 2.978 3.005 19.34 19.81 6.50 90.00 90.00 90.00 90.00 0 Paranatrolite 35- 458 2.94x 6.92x 4.444 19.07 19.13 6.58 90.00 90.00 90.00 0 Paranatrolite 42-1366 0 6.75x 2.957 2.905 18.93 19.21 6.59 90.00 90.00 90.00 0 Paranatrolite 41-1355 1 6.53x 4.74x 5.87x 18.48 18.96 6.55 90.00 90.00 90.00 0 Rocalitic 41-1355 1 6.53x 4.74x 5.87x 18.48 18.95 18.40 18.95 Rocalitic 33-1205 2.87x 6.55x 4.39x 13.10 13.10 6.64 90.00 90.00 90.00 7 Na ₂ Al ₂ SiyO _{10*} -2H ₂ O Na ₂ Al ₂ SiyO		33-1243		5.66,	3.00,	5.869	-5.00	20.00	00	20.00		23.00	X	Na ₂ Ga ₂ Si ₃ O ₁₀
Paranetrolite 35-458 2.94x 6.92x 4.444 19.07 19.13 6.58 90.00 90.00 90.00 0 NagAlgSigOlg*3H2O Paranetrolite 42-1366 0 6.75x 2.957 2.905 18.93 19.21 6.59 90.00 90.00 90.00 90.00 0 NagAlgSigOlg*3H2O Paranetrolite 41-1355 1 6.53x 4.747 6.67c 18.48 18.96 6.55 90.00 90.75 90.00 M CaAlgSigOlg*3H2O Paranetrolite 33-1205 i 2.87x 6.55x 4.39x 13.10 13.10 6.64 90.00 90.00 90.00 T NagAlgSigOlg*3H2O **Number of the control of the cont	Natrolite, (Ga)	34- 583		3.83_{x}	2.98_{x}	2.507	10.04	10.05	e en	00.00	00.00	00.00		Na ₃ Ga ₂ Si ₃ O ₁₀ KaAlaSiaOaa*2HaO
Paranatrolite 42.1385 O 5.75; 2.95; 2.90; 18.93 19.21 6.59 90.00 90.00 90.00 O NagKagaAl.ShOpe3H2O Scolorite 41.1355 1 6.65; 4.74; 5.876 18.48 18.96 6.55 90.00 90.75 90.00 M CaAl.ShOpe3H2O Tetranatrolite 33-1205 i 2.67; 6.656 4.89; 13.10 13.10 6.84 90.00 90.00 7 NagAgaCasAl.shOpe3H2O **MU-87—NES** Gottardiite 49.1814 i 11.5; 4.376 3.287 13.70 25.21 22.66 90.00 90.00 90.00 O NagMagaCasAl.shirtOzzz*93H2O Gottardiite 49.1831 * 11.8; 3.784 4.372 13.70 25.21 22.66 90.00 90.00 90.00 NagMagaCasAl.shirtOzzz*93H2O NagAgaCasAl.shirtOzzz*93H2O NagAgaCasAl.shirtOzz*93H2O			1	_	-									
Scolorite 41-1355 ! 6.63, 4.74, 5.87, 18.48 18.96 6.55 90.00 90.75 90.00 M CaAlsSiQ1o-3H4O Tetronatrolite 33-1205 i 2.87, 6.656 4.89, 13.10 13.10 6.84 90.00 90.00 90.00 T Na ₂ Al ₂ Si ₃ O ₁₀ -2H ₂ O **Nu-87**—NES Gottardite 49-1814 i 11.3, 4.87, 3.28 ₇ 13.70 25.21 22.66 90.00 90.00 90.00 O Na ₂ Mg ₂ Ca ₂ Al ₁ Si ₁₁₇ O ₂₇₂ *93H ₂ O Gottardite 49-1831 * 11.3, 3.784 4.37 ₂ 13.70 25.21 22.66 90.00 90.00 90.00 O Na ₂ Mg ₂ Ca ₂ Al ₁ Si ₁₁₇ O ₂₇₂ *93H ₂ O Gottardite 49-1831 * 11.3, 3.784 4.37 ₂ 13.70 25.21 22.66 90.00 90.00 90.00 O Na ₂ Mg ₂ Ca ₂ Al ₁ Si ₁₁₇ O ₂₇₂ Zoolite Nu-87 48-39 O 11.1, 3.28 ₂ 4.31 ₂		35- 458 42-1386	0		2.957	2.905	18.93	19.21	6.59	90.00	90.00	90.00	0 (Na ₂ K _{0.25} (Al,Si) ₅ O ₁₀ •3H ₂ O
NU-87-NES NU-87-NES NU-87-NES	Scolecite	41-1355	1	6.63_{x}	4.747	5.87 ₆								CaAl ₂ Si ₃ O ₁₀ •3H ₂ O NasAl ₂ Si ₃ O ₁₀ •2H ₂ O
Gottardiite 49-1814 i 11.3, 4.37, 3.287 13.70 25.21 22.66 90.00 90.00 90.00 O Na2MgaCasAlasSint7Ozzz*93HgO Gottardiite 49-1831 * 11.3, 3.784 4.372 13.70 25.21 22.66 90.00 90.00 90.00 O Na2MgaCasAlasSint7Ozzz Zeolite Nu-87 48- 39 O 11.1, 3.285 4.319	Tetranatrolite	33-1205	1	2.87g	0.006	256.5	13.10	10,10				,		**************************************
Gotterdille 49-1831 * 11.3, 3.784 4.372 13.70 25.21 22.66 90.00 90.00 90.00 O NasMgsCosAl ₁ sSi ₁₁₇ O ₂₇₂ Zeolite Nu-87 48- 39 O 11.1 ₂ 3.269 4.319 X Na ₂ Al ₂ SiO ₈									<u>NU-8</u>		-			
Gottorditte 49-1831 * 11.8, 3.784 4.372 13.70 25.21 22.66 90.00 90.00 90.00 O NasMgsCosAlsSilitO272 Zeolite Nu-87 48- 39 O 11.1, 3.289 4.319 X NagAlsSiOs				11.32	4.378	3.287								Na2Mg2CB5Al1pSi117O272*93H2O
							13.70	25.21	22.66	90.00	90.00	90.00	X	14agmgg-055119041170272 Na2AlgSiOs
		48- 545		4.32									x	

Zeolite Structure Type Name-Code

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Zeolite Structure Type Name—Code 3 Strongest Crys. Chemical Cell Parameters Cell Angles eolite Name PDF# QM Reflections Sys. Formula Nonasil-NON 38-1823 * 42- 25 C C₂₀H₅₂N₄ • 88SiO₂ Si₈₈O₁₇₆(C₅H₁₁NH₂)₄ 90.00 90.00 O 90.00 90.00 O 15.06 13.63 15.06 13.63 90.00 4.80_x 4.31_x 22.23 90.00 Offretite -OFF Offretite Offretite Innamed zeolite Innamed zeolite Innamed zeolite 2.88₇ 3.77₂ 6.88₃ 3.74₇ 3.75₄ (K,Ca,Mg)sAl₂Si₁₃O₃₈*14H₂O (K,Ca,Mg)sAl₂Si₁₃O₃₈*14H₂O (K,Ns)Al₂Si₁₉O₁₆₈, Ca₂Si₁S₁No₂Ka₂O₃₀*14H₂O (Ca₂Si₁S₁No₂Ka₂O₃₀Al₂Si_{7,8}O_{20,72}*xH₂O K_{2,04}Na_{2,06}Al₂Si_{7,8}O_{20,7} 22- 803 25-1186 47- 858 47- 636 11.5_x 11.5_x 9.32_x 11.5_x 11.4_x 7.58 7.58 90.00 13 29 120.00 120.00 13.29 13.29 8.576 2.837 90.00 120.00 13.29 13.16 90.00 47- 637 13.16 90.00 90.00 120.00 н 42- 308 42- 374 43- 578 11.6_x 6.59_x 11.6_x 3.76₉ 11.4₈ 3.76₉ 3.59₉ 3.58₆ 3.59₉ Na₂O-K₂O-Al₂O₃-SiO₂ K-Na-Al₂-Si-O-H₂O C₆₄H_{17.9}N_{1.3}O_{1.28}*K_{0.94}Na_{0.25}Al₂Si_{10.8}O_{25.2} M-34 13.11 13.11 15.05 9Q.00 90.00 120.00 Partheite-PAR 8.78 9.31 21.59 90.00 91.47 90.00 M Ca2AL6i4O15(OH)2+4H2O 36- 378 10.8, 8.12a 6.107 Paulingite-PAU 90.00 90.00 90.00 90.00 C 90.00 C 90.00 C 90.00 C $\begin{array}{lll} \text{Na}_{1.22} \text{Eb}_{0.60} \text{Al}_{3} \text{Si}_{6.50} \text{O}_{17.03} & \text{0}.12 \text{C}_{16} \text{H}_{40} \text{N}_{7} \text{O} \\ \cdot \text{KyCalSi}_{16} \text{Al}_{3} \text{O}_{47} & \text{22} \text{H}_{4} \text{O} \\ \text{K}_{2.26} \text{Na}_{0.28} \text{Ba}_{1.29} \text{Ca}_{2.67} \text{Al}_{11.65} \text{Si}_{20.59} \text{O}_{84} & \text{27} \text{H}_{2} \text{O} \\ \text{K}_{0.68} \text{Na}_{1.06} \text{Al}_{25} \text{is}_{1.6} \text{O}_{16.29} & \text{0}.09 \text{C}_{16} \text{H}_{40} \text{N}_{2} \text{O} \end{array}$ 3.08_x 3.08_x 3.08_x 3.25_x 35.10 35.11 3.58₉ 3.26₉ 8.28₈ 8.26₉ 3.26₉ 4.78₈ 3.26₇ 35.10 35.11 90.00 47- 354 35.10 R. 18 39-1378 50-1604 48- 536 35.11 35.12 90.00 -85 12 90.00 Phillipsite--PHI Bo(Si₂Al₂)O₈*3H₂O NaAl₂Si₆O₁₈*6H₂O Ba-Al-Si-H₂O (Ba,Na)*Al*SiO₄*H₂O (Ba,Li)AlSiO₄*H₂O 39-1377 12- 687 30- 107 30-1158 3.13_x 4.08_x 8.24_x 4.07_x 4.08_x 3.17₇
7.10₈
3.12_x
8.16₈ 90.00 124.43 90.00 M Harmotome Harmotome, (Na) Finne M. (Ba) Finne M. (Ba,Li) Phine M. (Ba,Na) 9.88 14.13 8.68 000 30- 743 2.67. Pillipate Pillipate Pillipaite 39-1375 51-1497 47- 764 24-1046 34-1857 3.21_x 3.19_x 4.01_x 6.58_x 7.49_x 7.16₇ 7.14₈ 5.07₈ 3.88₈ 3.18_x 7.18₆ 5.05₇ 4.21₈ KCa(SisAla)O18*6H2O 80.00 124.32 90.00 90.00 i Noacastarijois-oto; (K2_6Na)l4_9Si11_3O22*13H2O C2H18N-Al2O2-SiO2-Na2O-H2O Naa_4Ala_4Sia_6O22*4.6H2O Li2Nao_5Si2Al2O2.28*6H2O 90.00 000 90,00 90.00 ed zeolite 3.737 9.53 9.53 9.10 named zeolite C30,34Ne0,4Sl2,4Al2Os*4.8H2O (K,Na),7Si,Al)₃O₁₈*4H₂O Na)₃Al₁₂Si₁₂O₄₈*27H₂O K(Ca,Ba),(Si₂Al₂)O₁₈*6H₂O (K2)_{0,45}Ca_{0,62}Al₂Si₄O₁₃*1H₂O 3.17₉ 4.10₄ 2.66₆ 4.11₇ 3.14₈ 34-1458 46-1427 47- 162 39-1376 4.77_x 3.19_x 3.14_x 7.14_x 3.20_x 2.94_x 7.11₈ 4.07₆ 3.19_x named zeolite 0 i 0 i 8.76 14.24 8.69 90.00 110.20 90.00 Unnamed zeolite 8.71 14.29 90.00 90.00 124.65 90.00 90.00 90.00 delite H 16- 715 Rho-RHO. Li₂₄Bo₂₄P₂₄O₉₆*40H₂O Rb₂₄Bo₂₄Ao₂₄O₃₆*40H₂O Li₂₄Bo₂₄Ao₂₄O₃₆*40H₃O Co_{0.55}Na_{1.05}Ca₂Si_{2.45}O_{8.14}*xH₂O (Ca,Li)₁₁Li₄Bo₂₄(PO₄)₂₄*38H₂O 18.61 14.24 14.06 14.84 90.00 90.00 90.00 90.00 90,00 90,00 90,00 45- 292 48- 516 47- 248 2.90_x 3.81_x 3.76_x 3.32_x 3.64₈ 3.04₉ 3.14₇ ilophosphate-R 9.61₂ 3.18₄ 90.00 90.00 14.24 14.06 9.97₈ 10.6₆ 3.68₉ 46- 639 14.84 80.00 90.00 13.78 90.00 90.00 sapaite 90.00 90.00 90.00 90.00 90.00 3.23₄ 6.09₄ 3.44₅ 10.6₁ 3.01_g 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 Tl_{8.92}Al₁₃Si₃₇O₉₆ • 1.2H₂O Al₁₂H₁₃Si₃₆O₉₆ NaCaAlSiO • xH₂O 10.2_x 10.5_x 10.3_x 5.90₈ 3.52₃ 3.26₅ 3.52₉ 14.46 14.99 14.60 14.95 14.46 14.99 14.60 46- 553 27- 15 CiO*C (T) 27-1086 (NH₄)_{8.9}C_{50.7}Al_{10.6}Si_{57.4}O₅₅ •xH₂O Rb_{11.7}Be₂₄P₂₄O₅₆ 14.95 14.95 90.00 Rb,Be,P) 3.89 13.48 13.48 90.00 T117.7Be24A924O96 T121.2Be24P24O96 NagG23A12S12EO96*73H2O Ce0.08Na1.94A12S1E3O1E.6 (NH4)12A12S106O96 3.30_g 4.83_g 10.6_g 3.47_g 2.84_g 3.13_e 3.22_e 3.36_e 6.00₆ 3.09_e 14.00 13.65 15.03 14.00 18.65 16.03 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 4.43₈ 4.32_g 3.54_g 10.4_e 14.00 18.65 (TLBe,As) 46-.554 46-.555 CCC **OCCCO** (Ca) (Ca) (Ca) (NH4) (NH4) 39-1366 15.03 40- 59 č 14.70 14.70 14,48 14.70 90.00 44-1498 14.48 90.00 90.00 \(\text{NHA}_12\text{M12SigeOps}\)
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\(\text 44-1499 44-1500 43- 53 45- 129 3.39g 8.49g 10.3g 9.90g 3.54g 5.88₂ 2.54₂ 3.26₅ 3.74₃ 10.6₉ 1.33_E 2.91₆ 3.44₅ 3.13₂ 3.36₆ 14.40 14.82 14.60 14.00 14.40 14.82 14.60 14.00 15.03 14.40 14.82 14.60 14.00 15.03 90.00 90.00 90.00 90.00 90.00 80.00 90.00 90.00 90.00 90.00 90.00 (NH4) (Na,Ca) Lie Rho, (Rb,Ba,As) Lie RHO -RON Roggianite-90.00 90.00 T Be₂Ca₄Al₄Si₇O₂₄(OH)₄ • 3H₂O rianite 18.37 18.37 9.18 39- 366 13.0. 9.16 3.414 RUB-3-RTE 102.23 90.00 M 102.22 90.00 M (C₁₇H₁₃N)₂SiO₂ SiO₂ 90.00 90.00 50-1695 50-1708 9.66_x 4.96₉ 4.33₈ 4.53₂ 7.43 7.43 č **RUB-13** RTH C16H3.36N1.2 Si30.4B1.6O64 C11H27 Si30.4B1.6O64 90.00 90.00 96.58 96.58 90.00 M 90.00 M 50-1877 9.83 9.83 60-1707 9 66 RUB-10-RUT 48- 747 43- 52 47- 594 47- 596 52-1184 Al₂Si₆₀O₁₀₃ C_{1.2}H_{3.6}Al₂N_{0.3}Ns_{1.4}O_{197.7}Si₅₂•6H₂O H_{1.88}Ns_{0.02}Al₂Si₅₀O₁₀₄ Ns₁-Al₂Si₅₀O₄C₄H₁₂N Military Mil 4.03_x 4.01_x 4.03_x 4.07_x 4.03_x 6.19₈ 3.83₆ 6.19₈ 3.90₇ 3.87₇ 3.857 6.17e 3.857 4.00s 3.946 0.000 X M X 13.10 12.90 12.40 90.00 113.50 90.00 Si35TiO72 H2O SiO₂-Al₂O₃-NH₄F-(CH₄)₄NCl-H₂O 49- 933 8.32 4.07 3.98 STA-1--SAO C₂H₂N+[Mg₅Al₂₃P₂₈O₁₁₂] Mg_{0.5}Al_{0.8}PO₄ 90.00 90.00 49- 628 6.38₁
5.86₂ 21.65 22.02 90.00 90.00 90.00 90.00 4.441 61-1757 SAS STA-6 90.00 90.00 T Zno.sAlo.sPO4 61-1754 5.46_{*} 4.22 4.58 14.33 14.83 10.44 90.00 STA-2 SAT C₆₄H₁₀₂N₆*(Mg_{8.4}Al_{80.6}P₃₆O₁₄₄) Mg_{0.3}Al_{0.8}PO₄ 90.00 120.00 R 90.00 120.00 R 4.10₅ 10.8₇ 90.00 49. 620 C 12.78 13.23 30.94 30.63 5.44_a 4.25_a 51-1756 13.23 UCSB-8Co--SBE 90.00 90.00 80.00 T xC9H24N2*(Al32C032P54O256) 49- 625 C 13.5_g 6.031 19.07 19.07 27.59 13.62 UCSB-6GaCo--SBS CSB-6GaCo 90.00 90.00 120.00 H xC7H20N2*[Ga24Co24P48O192]

13.6,

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49- 626 C

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Zeolite Structure Type Name—Code

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Zeolite Name	PUF# C	IAI	- 100			<u> </u>							•
					10.5	*****		B-10Ga	90.00	$\frac{BT}{90.00}$	120.00	R	xC ₁₀ H ₂₆ N ₂ • [Ga ₃₆ Zn ₃₀ P ₇₂ O ₂₂₈]
UCSB-10 GaZn	49- 617,	C	14.7x	14.08	12.53	18:08		41.95		,	120.00		
•				•			_ <u>s</u>	SZ-44-	<u> SFF</u>			v	C ₁₁ H ₂₂ -Al ₂ O ₃ -N-N ₂ -SiO ₂ -H ₂ O
SSZ-44		0 0 :	4.63 _x	11.0a 11.0a	3.48 ₄ 10.2 ₄	•	-	•	•			X	C ₁₁ H ₂₂ N-Al ₂ O ₈ -Na-SiO ₈ -H ₂ O
SSZ-44	02	• .				.•	C:	irima-9	-SGT				•
<u>.</u>	43- 40	0	5.162	3.39 _x	3.36,		25	gmu-z				x	Nan,3Al2,584Si 100O203,998
ZSM-58 Zeolite Sigma-2	40-1498	*	4.54g	4.49g	2.76g 3.344	10.24 10.24	10.24 10.24	34.38 34.38	90.00	90.00	90.00	T	SiO ₂ Si ₆₄ O ₁₂₈ (C ₁₀ H ₁₇ N) ₄
Zeolite Sigma-2	42- 26	С	4.49 _x	4.54 _x	3.344	10.24			•		00.00		
	•	_					50	paante	-SOD	<u>.</u>		x	AlPO4*1.085H2O
A1PO4-20 A1PO4-20	43- 569 45- 509	o i	3.63 _x 3.64 _x	6.33 ₅ 6.29 ₄	4.464	8.91	8.91	8.91	90.00	90.00	90.00	C	AIPO4 C ₄ H ₁₂ N-N ₀₂ O-AIPO ₄ -H ₂ O
AlPO4-20 AlPO4-20 (Sodalite)		0	3.64 ₂ 6.19 ₂	4.45 ₄ 3.59 ₆	6.29 ₃ 4.37 ₃	8.93	8.93	8.93	90,00	90.00	90.00	X	AIPO4
CaAPO-20		Ò	3.66 _x	4.484	6.323	8.98	8.98	8.98	90.00	80.00	90.00		C ₄ H ₁₂ N-AlPO ₄ -C ₀₃ O ₄ -H ₂ O C ₄ H ₁₂ N-N ₀₂ O-AlPO ₄ -C ₀ O-H ₂ O
CuAPO-20 DPZ-7A	50-1700 47- 246	0 i	3.65 _x 3.60 _x	4.46 ₃ 2,55 ₉	6.31 ₃ 2.79 ₉	8.95 8.82	8.95 8.82	8.95 8.82	90.00 90.00	90.00 90.00	90.00	C	$Na_5Za_6(PO_4)_6 \cdot 8H_2O$
DPZ-7B	47- 247 11- 491	*	2.61 _x 3.35 _e	6.40 _x 1.93 ₇	3.69 _x 2.19 ₅	9.03 8.21	9.03 8.21	9.03 B.21	90.00 90.00	90.00	90.00	C	Na ₆ Zn ₆ (AsO ₄) ₅ =8H ₂ O (Fe ₁ Mn) ₄ Bc ₃ Si ₃ O ₁₂ S
Danslite Ethylene glycol sodalite	49-1063	*	3.60	6.248	4.425	8.83	8.83	8,83	90.00	90.00	90.00		C ₂ H ₄ (OH) ₂ +0.167SiO ₂
Genthelvite	88- 467 37- 473	*	3.31 _x 3.72 _x	1.91 ₄ 2.63 ₂	2.17 ₂ 2.15 ₂	8.12 9.12	8.12 9.12	8.12 9.12	90.00 90.00	00.00 00.00	90.00	C	Zn ₄ Be ₃ Si ₃ O ₁₂ S Na ₆ Ca ₂ Al ₆ Si ₆ O ₂₄ (SO ₄) ₂
Hauyne Hauyne	50-1644		3.72 _x 3.72 _x	2.62s 2.64)	2.14 ₇ 2.15 ₃	9.08 9.12	9.08 9.12	9.08 9.12	90.00 90.00	90.00 80.00	90.00		Ko.26Na6.11Ca1.36Al3.66Si6.14O24[(SO4)1.63Cip.28] Na6Pb2Al6Si6O24(SO4)2
Hauyne-Pb Hydroxysodalite	29-1221 11- 401		3.63 _x	5.28 ₈	2.56 ₈	8.87	8.87	8.87	90.00	90.00	90.00		Na ₄ Al ₃ Si ₃ O ₁₂ (OH)
Lazurite	17- 749 41-1392	i	3.71 _a 3.71 _a	2.62a 2.62a	2.87 ₅ 6.43 ₄	9.09 9.09	9.09 12.86	9.09 25.71	90.00 90.00	90.00	90.00		Na ₆ Ca ₂ Al ₅ Si ₅ O ₂₄ (SO ₄) ₂ Na ₅ Ca ₂ Al ₅ Si ₆ O ₂₄ (SO ₄) ₂
Lezurite Lezurito	41-1393	*	3.72	2.62	2.146	36.36 9.07	51.40 9.07	51.40 9.07	90.00	90.00	90.00		NacCa2AleSicO24(SO4) NacCa2AleSicO24(SO4)2
Lezurite MnAPO-20	42-1312 50-1698	i O	3.71 _x 4.51 _x	2.62 ₈ 3.69 ₇	2.14 ₅ 2.62 ₂	9.00	9.00	9.00	90.00	90.00	90.00	C	C ₄ H ₁₂ N-Na ₂ O-AlPO ₄ -MnO-H ₂ O
NiAPO-20	50-1699	o	3.68 _x 3.71 _x	4.51 ₄ 2.63 ₈	6.42 ₃ 6.45 ₇	8.99 9.08	8.99 9.08	8.99 9.08	90.00 90.00	90.00	90.00		C4H12N-AIPO4-NiO-H2O NagAlgSigO24SO4
Nosean SAPO-20	17- 538 45- 510	i	3.67	4.493	6.35;	8,98	8.98	8.98	90.00	90.00	90.00	CX	(Al _{0.47} Si _{0.12} P _{0.40})O ₂ Al _{0.47} Si _{0.15} P _{0.25} O ₂ *O,16C ₄ H ₁₂ N*O.12H ₂ O
SAPO-20 SAPO-20	47- 615 47- 616	i	3.66 _x 6.33 _x	4.48 ₆ 3.66 ₂	6.28 ₄ 4.48 ₄	8.97	8.97	8.97	90.00	90.00	90.00) C	Alo.47Sio.15Pe 38U2
Silica sodalite	51-1423	i	3.61 _x	6.25 ₆ 6.28 ₄	4,424	8.86 8.88	8.86 8.88	8.86 8.88	90.00	90.00	90.00		(C ₂ H ₇ NOXSi ₆ O ₁₂) No ₄ Al ₃ Si ₃ O ₁₂ Cl
Sodalite Sodalite	37- 476 46- 103	*	3.62 _x 3.72 _x	6.444	2.09 ₂ 2.63 ₄	9.10	9.10	9.10 8.87	90.00	90.00	90.0	O	Na7AleSi6O2183 (C3HeO2)2(SieO12)2
Sodalite Sodalite	50- 562 52- 145	*	3.62 _x 3.70 _x	4.44g 6.41s	6.28 ₄ 2.61 ₃	8.87 9.06	8.87 9.06	9.06	90.00	90.00			Na ₈ Mg ₃ Si ₉ O ₂₄ (OH) ₂
Sodalito	52- 146	i	3.67 _x	6.36	2.123	9.00	9.00 8.99	9.00 8.99	90.00 90.00	90.00			NasMg3SigOzdCl,OH)2 Nas[AlsSigOzd]2NaF+xHzO
Sodalite (F) Sodalite (Li,Cl,Be,As)	49- 937 46- 560	Ċ	6.35 <u>*</u> 3.68 _*	3.679	2.12 ₄ 5.82 ₈	8.99 8.24	8.24	8.24	90.00	90.00	90,0	0 C	Li4ClBe3As3O12 Li4ClBe3P3O12
Sodalite (Li,Cl,Be,P) Sodalite, (Ag)	46- 561 43- 239	Ç	3.28 _x 3.65 _x	5.68 ₅ 2.83 _x	3.59 ₃ 2.11 _x	8.03 8.96	8.0 3 8.96	8.03 8.96	90.00 90.00	90.00 90.00			
Sodalite, (Ag)	43- 239		3.62 _x	1.991	2.57 _z	8.92 9.02	8.92 9.02	8.92 9.02	90.00 90.00	90.00			
Sodalite, (Ag,Ga) Sodalite, (B(OH)4)	43- 240 43- 250	i	2.85 _x 3.66 _x	3.68 ₄ 2.60 ₉	2.417	9,01	9.01	9.01	. 90.00	90.00	90.0	0 C	Nag[AlSiO4]6[B(OH)4]2
Sodalite, (B(OH)4) Sodalite, (CN)	43- 251 87- 196	i	3.67 _x 3.64 _x	2.60 ₇ 6.31 ₅	6.33 ₂ 2.58 ₄	18.06 8.92	18.06 8.92	9.01 8.92	90.00 90.00				
Sodalite, (CO3)	24-1045		6.26,	3.63,	2.589	17.71 8.84	17.71 8.84	17.71 8.84	90.0 0				
Sodalite, (Ga) Sodalite, (Ge)	43- 245 48- 141	Ċ	6.21 <u>.</u> 6.88 ₂	3.60 _x 3.69 ₉	2.55 ₉ 2.61 ₈	9.03	9.03	9.03	90.00	90.00	90.0	юС	NagAlsGesO24(OH)2
Sodalite, (Ge) Sodalite, (Ge)	43- 241 43- 242	*	2.62 _x 2.61 _x	6.42 ₉ 2.86 ₉	1.61 ₈ 1.36 ₉	80.9 80.9	9.08 9.03	9.08 9,03	90.00				
Sodalite, (Gc,B(OH)4)	43- 248	i	2.64,	1.629	3.739	9.15 9.09	9.16 9.09	9.15 9.09	90.00 90.00				
Sodalite, (Ge,Br) Sodalite, (Ge,Br)	43- 138 43- 248	Ç	3.71 _e 2.43 _e	2,43 ₃ 1.61 _x	4.07 ₂ 3.71 ₉	9.08	9.08	9.08	90.00 90.00	90,00	90.0	00 C	NesIAlGeO4lsBr2
Sodalite, (Ge,Cl) Sodalite, (Ge,Cl)	43- 139 43- 247	Ç	8.69 _s 2.61 _s	6.40s 3.69g	2.61 ₃ 2.42 ₉	9.04 9.03	9.04 9.03	9.04 9.03	90.00				
Sodalite, (Ge,ClO4)	43- 244	i	3.77 _x	2.927	1.527	9.23 9.18	9.23 9.18	9.23 9.18	90.00				
Sodalite, (Ge,I) Sodalite, (Ge,I)	43- 140 43- 249	¢	3.75 _x 2.45 _x	2.45 ₃ 3.74 ₂	4.59 ₂ 2.16 ₉	9.16	9.16	9.16	90.00	90.0	90.0	O 0	Nas[AlGeO4]sl2
Sodalite, (Ge,NO3) Sodalite, (GeBr)	43- 243 43-1487	i	3.72 _x 3.71 _x		1.61 ₈ 6.43 ₃	9.11 9.09			90.00 90.00				
Sodalite, (K,Cl)	41. 72	0	3.75 _x	2.175	2.893		8.93	8.93	90.00	90.0	0 90.	00 (
Sodalite, (NH4) Sodalite, (NO2,CO3)	14- 17 48- 443	O i	3.64 _z 3.67 _x	6.36g	2.607	9.00 9.00	9.00	9.00	90.00	90.0	0 90.	00 (Non[AlSiO4]5(NO2)(CO3)0.6
Sodalite, (Na,ClO4) Sodalite, (Na,Zn,P)	44- 79 45- 122	i	3.72 _x 6.24 _x		2.142 2.557	9.10 8.63			00.00 00.00				
Sodalite, (NaNO3)	50- 248	*	3.67,			8.98	8.98	8.98	90.08	90.0	0 90.		C NasIAISiO4le(NO2)2 K Na2RbAl2Cl(SiO4)3
Sodalite, (Rb,Cl) Sodalite, (Zn,As)	41- 73 45- 134	o C	3.16 ₂ 6.38 ₃	3.698	2.61g	9.03	9.03	9.03	90.00	90.0	0 90.	00 (Nag(ZnAsO ₄) ₉ •8H ₂ O
TASO-20 TASO-20	46- 865 46- 866	0	3.66 ₁ 3.65 ₁										K ((CH ₃) ₄ N) ₂ O-Na ₂ O-Al ₂ O ₃ -TiO ₂ -SiO ₂ -H ₂ O K Na ₂ O-Al ₂ O ₃ -TiO ₂ -SiO ₂
Unnamed zealite	24- 893		3.65,	2.83,	2.59 _x	8.88	8.88		90.00				C Na ₄ (Al,Ga) ₂ Sl ₃ O ₁₂ (OH) C Na ₅ Ca ₂ Al ₃ Ga ₃ Si ₅ O ₂₄ (CrO ₄) ₂
Unnamed zeolite Unnamed zeolite	25- 797 25- 798		3.75, 3.76,	2.669	2,461	9.18 9.25	9.22	9.22	90.00	0.09	0 90.	.00	C NacCu2Al2Ga4SicO24(MoO4)2
Unnamed zeolite Unnamed zeolite	25- 799 29-1184	i	3.77, 3.81,	2.31,		9.25 9.35			90.09 90.09				C Na ₆ Ca ₂ Al ₂ Ga ₄ Si ₆ O ₂₄ (WO ₄) ₂ C Na ₆ Ca ₂ Al ₆ Ga ₆ O ₂₄ (WO ₄) ₂
Unnamed zeolita	29-1186	i	3.72	2.64	4.561	9.13	2 9.19	9.12	90.0				C NacCa2AlsSisO2s(TeOs)2 C 1.0Na2O+Al2O3+1.68SiO2+1.73H2O
Unnamed zeolite Unnamed zeolite	31-1270 31-1271		3.67 3.67	6.36 ₁	2.59	8.9 8.9	8.98	89.8	90.0	0 90.0	0 90	.00	C 1.08Na ₂ O • Al ₂ O ₃ • 1.68SiO ₂ • 1.8H ₂ O
Unnamed zeolite	32-1031 32-1032	*	3.68 3.65	2.13	2.413	9.0 8.9			90.0 90.0				C Na4Al3Si3O12I C Na4Al3Si3O12Br
Unnamed zeolite Unnamed zeolite	33-1164	*	3.65	2.11	2.393	8.9	3 8.9	3 8.93	90.0	0.00	00 00		C Ag4Al3Si3O12I
Unnamed zcolite Unnamed zcolite	38- 21 38- 22	i	3.66 3.70	_x 6.35.		8.9 9.0	8 9.0	6 9.06	90.0 90.0	0 90.0	00 90	.00	C Nag(AleSieO24)(NO2)2*3H2O C NagAleSieO24(SCN)2*2H2O
Unnamed zeolite	39. 100 40- 100	ì	2.56	x 3.62	2.800	8.8 8.7	6 8.8		90.0 90.0				C Na ₈ Ga ₁₀ Si ₂ O ₂₃ •10H ₂ O C Na ₈ (AlSiO ₄) ₆ (OH) ₂
Unnamed zeolite Unnamed zeolite	40- 100		3.57 6.45	3.72		9.1	2 9.1	2 9.12	90.0	0 90.	90	.00	C Nas(A)SiO4)8
Unnamed zeolite Unnamed zeolite	40- 10: 41- 20-	2 j	3.62	2.55	s 2.80 ₈	8.8 25.5			90.0 90.0	90.	00 90	.DO	C Na ₆ (AlSiO ₄) ₆ -8H ₂ O O Na ₈ (AlSiO ₄) ₆ (B(OH) ₄) ₂
Unnamed zeolite Unnamed zeolite	41- 203 41- 53	5 i	2.60	3.69	2.13,	9.0 8.9	1 9.0	9.01	90.0 90.0				C Nag(AlSiO ₄)g(B(OH) ₄) ₂ T Nag(AlSiO ₄)g(OH) ₂ =xH ₂ O
Omenied Econte	42- 03		3.02	_ 0.01		5.5							

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2:

Zeolite Structure Type Name—Code Cell Parameters 3 Strongest Crys. Chemical Cell Angles Zeolite Name PDF# QM Reflections Sys. Formula В 3.71, 3.69, 3.63, 3.66, 6.41, 6.44₆ 6.38₈ 2.10₈ 2.83₈ 2.63₈ 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 C₄H₆Al₆N₈₆O₂₆Si₆ Nn₈(AlSiO₄)₆CO₃ Na₆(AlSiO₄)₆(OH)₂*2H₂O Na₆(AlSiO₄)₈*4H₂O 42- 213 Tinnemed reolite 00000 Innamed replits 42- 214 2.61 9.03 9.03 9.03 42- 215 42- 216 42- 217 2.57s 2.59s 3.71_x Unnamed reolite
Unnamed reolite 8.89 8.97 9.10 8.97 9.10 90.00 90.00 90.00 Innamed zeolite 9,10 90.00 90.00 Nas[AlSiO4] 4.578 2.636 2.85s 2.838 2.162 2.63_x 3.22₆ 2.12₇ 6.33₉ 2.45₂ Aga[AlSiO₄]₅CrO₄ Aga[AlSiO₄]₅CrO₄)₂ Aga[AlSiO₄]₆(NO₂)₂ Na₆[AlGeO₄]₆·8H₂O Na₆Ca₂[AlSiO₄]₆(WO₄)₂ 3.23 9.12 9.12 9.12 9.12 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 Vinnamed zeolite 44- 306 00000 Unnamed zeolite
Unnamed zeolite
Unnamed zeolite 44- 307 44- 308 44- 309 44- 310 3.72_x 3.67_x 3.65_x 3.76_x 9.12 9.00 8.95 9.18 9.00 8.95 9.18 Innamed scolite 90.00 90.00 44- 311 44- 312 44- 313 44- 704 44- 705 2.63₂ 2.44₂ 2.14₄ 6.28₄ 4.47₂ Na₅Cd₂[AlSiO₄]₆(M₅O₄)₂ Na₆Cd₂[AlSiO₄]₆(WO₄)₂ Pb₄(AlSiO₄]₆(OH)₂*5H₂O [C₂H₆O₂]₂[Si₁₂O₂₄] [(H₃C)₄N][GaSi₅O₁₂] Unnamed zeolite Unnamed zeolite Unnamed zeolite Unnamed zeolite 3.72_x 3.73_x 3.71_x 3.62_x 3.65_x 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 9.13 9.13 3.23 90.00 CCCCT 3.23₂ 2.88₇ 4.44₅ 6.33₆ 90.00 90.00 90.00 90.00 9.14 9.14 9.09 9.09 8.66 8.96 8.86 8.93 8.86 8.93 Unnamed zoolite 90.00 44-1396 47- 234 49- 757 39- 191 16- 612 3.71_x 3.65_x 3.63_x 9.44_x 3.63_x 2.62₆ 6.33₈ 6.30₈ 2.84₆ 2.81_a 2.87s 2.587 2.577 2.98s 2.56x NagCa2AlcSiqO₂₄(SO₄)z Nag(AlcSiqO₃(SO₀)y NagAlcSiqO₃(CO₃)₀₋₆(OH)*3H₂O NagAlcSiqO₃(CO₃)₀₋₆(OH)*3H₂O NagK₂AlcSiqO₂₄*12F₂O Na₂O*Al₂O₃*2.1SiO₂*xH₂O 9.07 90.00 90.00 90.00 90.00 9.07 9.07 90.00 90.00 0000 Unnamed zeolite
Unnamed zeolite
Unnamed zeolite
Zeolite V
Zeolite Zh 8.93 8.90 9.41 8.93 8.90 9.41 90.00 90.00 90.00 8.93 SSZ-35--STF 61-1378 51-1693 7.27₂ 4.47₃ 4.46₃ 11.0_x 11.1_x 11.0_x 9.06₂ 4.61₇ 4.60₅ SiO₂ SiO₂ K_z(Al_zSi_{1-z})O₂•H₂O 88.84 111.17 95.81 95.19 111.17 90.70 A 95.19 105.71 A X FTQ-9 6837-35, as-synthesized i 14.76 11.64 18.16 11.57 SSZ-35, as synthesized, i. siumino silicate SSZ-35, calcined 51-1595 11.43 51-1594 0 4.561 11.61 7.39 94,97 96.03 104.97 A SiO₂ Stilbite STI 4.05_x 4.06₆ 4.04_x 3.99₇ 4.76₇ 29-1185 25- 124 24- 894 9.10_x 9.03_x 4.06_x 8.75_x 4.04_x 3.03₈ 3.03₈ 9.11₉ 3.03₆ 2.97₇ 13.64 13.60 13.64 15.86 18.20 18.22 18.24 90.00 90.00 90.00 90.00 90.00 17.84 17.88 11.27 90.00 90.00 90.00 90.00 90.00 128.00 OO M M (Na,K,Ca)2(Si,Al)9O18 • 7H2O Ca2Al4Si14O26*14H2O (Ca,Na)18(Si,Al)9O18*8H2O Shibite 90.00 132.15 90.00 128.07 Stillita (Cn) 46-1082 19.90 18.24 11.98 Nao.222Ca1.276Cu3.401AlioSi25O72*xNH3*32H2O Nao.222Ca1.276Cu2.401AlioSi25O72*32H2O 11.25 Stilbite, (Na,Ca,Cu) 45-125E 18.81 44-1479 4.069 3.035 13.64 18.25 11.27 90.00 127.94 90.00 (Na,K)Ca2Al6Si15O34*14H2O Unnamed zeolite 9.14 M SSZ-23--STT 65Z-28 51-1377 9.42, 10,99 8,408 13.12 21.77 13.70 90.00 102.51 90.00 M Terranovaite—TER (Na4.3Ko.3Mgo.2Cas.7)(Al12.3Si67.7O160) • 29H2O NaCaAl3Si17O40 • H2O 50-1714 61-1439 0 9.75 9.75 23 88 90.00 90.00 90.00 Thomsonite-THO 35- 498 46-1448 2.86_x 4.62₃ 13.05 13.08 13.09 13.10 13.26 13.22 90.00 90.00 90.00 O NaCa₂Al₅Si₅O₂₀•6H₂O ... ³ NaCa₂Al₅Si₄O₂₀•6H₂O -TON Theta-1-H-Al₂O₂-SiO₂
C_{26,4}H_{70,4}N_{8,2}*0.15N₈₂O*Al₂O₃*120SiO₂*8.6H₂O
C_{27,6}H_{70,4}N_{8,2}*0.35K₂O*Al₂O₃*126SiO₂*5.6H₂O
C₆H₁₀N₂N₂O-Al₃O₃-SiO₂H₃O
C₆H₁₀N₂+C₅O-Al₂O₃-SiO₂+H₃O 37- 355 39- 96 39- 97 4.33_x 3.68₉ 3.67₉ 3.63₇ 3.63₇ 3.62₇ 13.72 17.16 5.02 90.00 90.00 -90.00 0 3.64_e 4.38_e 4.36_e 4.37_e 4.38_e Nu-10 39-, 98 39- 99 3.68₉ 3.68₉ 3.627 44- 611 44- 612 38- 194 37- 356 39- 95 24SiO₂•1.2(C₂H₅)₂NH•0.9H₂O 24SiO₂•(C₂H₆)₂NH•0.5H₂O H-Al₂O₃-SiO₂ K_{0.70}Al₂Si₁₂₆O_{255.35} C₂H₂₂N₅-Na₂O-K₂O-SiO₂-Al₂O₃ Na-10 Na-10 Na-10, (H) Na-10, (K,H) Na-10, (K,Na) 4.35_x 4.35_x 3.57_x 3.65_x 3.67_x 3.62_x 4.36_x 3.63₉ 10.7s 10.8s 4.31s 3.67s 4.31s 17.40 17.40 90.00 90.00 90.00 90.00 OOXXX 10.8, 3.58, 89- 94 49- 77 49- 82 49- 83 49- 84 O₂H₂₂N₅·Na₂O-Al₂O₃-SiO₂ 24SiO₂•1.82ICl 24SiO₂•1.35IBr 24SiO₂•1.18I₃ 24SiO₂•1.5Br₂ 3.64_x 4.36_x 3.66_x 3.66_x 3.66_x 4.35₂ 8.67₂ 4.36₇ 3.61₇ 4.35₉ 3.60₇ 3.61₈ No-10, (Na) nnamed zeslita inamed zeslita inamed zeslita 13.84 13.84 13.85 18.84 17.40 17.40 17.38 17.40 5.03 5.03 5.03 5.03 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 4.357 4.357 3.617 innamed seolite 90.00 ZSM-22 ZSM-22 ZSM-22 (SI) Zeolite KZ-2 Zeolite Theta-1 44- 119 50-1675 46- 569 37- 412 38- 197 3.67_x 3.68₈ 4.36₆ 3.66₉ 3.68₇ 3.60_a 10.9₇ 3.67₈ 10.8₈ 10.9₈ 4.36_x
4.37_x
10.8_x
4.35_x
4.36_x 4.8(C7H10BrN) • 1.8Na2O • Al2O3 • 235SiO2 ò K₆AlgSigO1g3+x (C₂H₆)₂NHSi₂₄O₄₈ 1.66SiO₂•0.00716Al₂O₃•0.00807Na₂O 17.48 17.42 90.00 90.00 ö 90.00 90.00 13.84 17.42 90.00 5.04 SiO₂ Colite Theta-1 Polite Theta-1, (Ga) Polite Theta-1, (Na,H) 43- 23 43- 320 4.37_x 11.0_x 10.9_x 3.68₂ 4.38₇ 4.38₈ Al₂Si₇₀O₁₄₃ • H₂O Na₂O-Ga₂O₃-SiO₂-H₂O 000 3.62₇ Na₂O-Al₂O₂-SiO₂-H₂O 37. 357 Tschörtnerite-TSC schärtnerite 50-1611 C 18.3, 15.82 9.141 31.62 31.62 31.62 90.00 90.00 90.00 C Ca4(K,Ca,Ba,Sr)3Cu3(Al12Si12O48)(OH)10=20H2O VPI-5 ·VFI APO4-64 APO4-H1 MCM-9 MCM-9 42- 28 48- 33 42- 427 46- 646 15- 274 8.03₁ 8.23₂ 4.21₈ 3.95₇ 3.93₄ Al₁₈P₁₈O₇₂ AlPO₄ * 2.14H₂O C₆H₁₆N-Al₂O₇-SiO₇-P₂O₅-H₂O Al₂O₃-SiO₇-P₂O₆-C₁₈H₂₉NO-H₂O AlPO₄ * xH₂O 16.1_x 16.5_x 16.4_x 16.5_x 16.5_x 4.20₁ 4.12₂ 8.20₆ 5.68₆ 3.28₄ 18.55 18.56 18.98 90.00 120.00 90.00 н named reolite 44- 503 45- 176 45- 476 46- 171 48- 651 AIPO4*xH₂O AIPO4*2.33H₂O AIPO4 Al₂O₃*P₂O₄ Al₂O₃*P₂O₄ AIPO4*0.5C₆H₁₆N*20H₂O 4.06₂ 8.22₁ 4.06₂ 8.23₆ 4.06₂ 16.4_x 16.4_x 16.5_x 16.5_x 16.4_x 4.08₂ 8.93₁ 3.28₂ 6.17₈ 4.08₂ 18.99 18.88 18.99 18.99 18.98 18.99 90.00 90.00 120.00 H 1C *00 90.00 120 00 VPI-7-VSV С 90.00 90.00 O Ne28.6H3.5Z018Sis6O144-40H2O 46- 568 6.37_x 3.254 39.88 10.32 10.22 3.143 -WEN Wenkite-90.00 120.00 H CasBa4AlaSi11O41(OH)2(SO4)3-H2O 19-1418 2.690 7,46 90.00 inkita 3.46_x 3.88, 18.51 13.51 Yugawaralite—YUG (Ba,Li)•Al•SiO4•H₂O Ca(Si₆Al₂)O₁₆•4H₂O Sr-Al-Si-O-H₂O 30- 741 39-1372 17- 756 4.24_z 4.67_x 5.88_z 8.03_z 2.71_x 3.05₉ 4.76_x 5.85_x 90.00 111.20 90.00 M red zeolite ingawaralite Polite Q. (Sr) Zoolite Q. (Sr) 14.01 10.06 6.73 *00 90.00 111.70 90.00 M SrAl-SiaO14+4H2O 13.48 13.86 10.10

1.

SUZ-9, as-synthesized SUZ-9, calcined

Zeolite Structure Type Name—Code Cell Angles Crys. Chemical Cell Parameters 3 Strongest Sys. Formula b β C Zeolite Name PDF# QM Reflections ZAPO-M1-ZON 90.00 90.00 90.00 O Al32P12O125(C4NH12F) 14.53 15.33 16.60 49-631 O 8.30 4.236 6.575 Refined structure, No IZA code—ZZ1 AIPO₄
NH₄Al₂P₂O₈(OH)*2H₂O
Al₂O₃*1.03P₂O₅*0.44H₂O*0.46C₆H₁₂N₂
C₂TNSi₂O₁₅
C₄H₁₂N₂O₁₃Si₆ 8.72 9.56 90.00 90.00 90.00 12.4, 5.92, 4.23, 3.37, 11.2 6.98₉ 6.69₇ 3.47₈ 3.11₇ 24.08 9.62 14.41 9.57 3.98 AlPO4-14A AlPO4-15 AlPO4-9 icocc 90,00 M X M M 45- 183 43- 562 50- 58 90.00 7.42 4.90 80.00 107.71 13.39 .13.57 15.13 50- 5B 46- 567 3.65¢ 4.26 Cesium silicotitanate 22.46 90.00 91.67 3.94 Gn₃P₂O₁₂(CH₃NH₂)₂·H₂O Gn₃P₃O₁₂(CH₃NH₂)·H₂O H₂Si₂₂O₄·xH₂O H₂Si₂₂O₄·xH₂O Na₂Si₁₄O₂₂·10H₂O EU-19 0 0 X 6.067 4.63a 3.21e 3.39s 15.5e 9.73 14.11 8.80 16.93 90.00 90.00 90.00 90.00 3.60₇ 8.46_x 3.44₈ 8.89₆ 3.15_x 8.14_x 3.66_x 19.7_x 17.9_x 16.28 51- 240 51- 241 37- 385 GaPO4-M1 90.00 10.25 GaPO4-M2 Kenyaite, (H) X 37- 386 42-1350 Kenyaite, (H) Magadiite 90.00 7.28 15.71 90.00 96.40 7.80 3.45 Na5114029-5-6H20 AIPO4-2H20 Ga217320120(OH)16F6(C6H21N2)k-12H2O Na5A3510-2-9H20 FeB-Q020H10 90.00 90.00 90.00 90.00 90.00 7.42 9.51 16.38 16.46 9.04 94.00 90.40 90.00 90.00 13.2₈
2.71_x
3.86₄
3.41_g
8.02₉ 3.41_x 4.76_x 8.19_x 8.23_g 3.11_x 7.34₆ 4.55₈ 5.79₄ 4.42_g 2.96₆ 13.20 90.00 7.11 5.18 29- 668 Magadiito, (H) 90.00 90.00 90.00 90.00 8.45 16.38 33- 32 51- 80 COM Motevariscite č 15.00 17.49 Mu-2 44- 50 45- 121 Unnamed zeolite 9.35 96.23 č Peg. 4023.10 NaFe3P3O12 Ne1,BMga,9Si1,1O4 Ne1,14Mga,13Ala,16Si1,06O4 Ne2MgSiO4 (C₉H₂₂N₂)₄Si₄₀O₇₂*8H₂O Unnamed zealite 90.00 90.00 90.00 114.18 90.00 90.00 90.00 90.00 90.00 90.00 3.11₀ 4.26₈ 4.24₈ 2.97₉ 3.58₄ 2.73₉ 2.96₆ 2.58₅ 2.58₇ 3.51₃ 6.50 7.11 M 12.33 6.16₂ 2.67₂ 2.62₃ 12.00 45- 126 47-1497 Unnamed zeolite Unnamed zeolite Unnamed zeolite 5.33 10.60 10.82 26.25 5.33 000 14.40 5.28 5.25 47-1498 7.08 90.00 90.00 47-1499 2.64 90.00 Unnamed sec 7.43 90.00 90.00 52- 140 13.1. Unnamed zeolite 90,00 90,00 90,00 90.00 90.00 90.00 AlPO. • 2H2O 5.39₆ 4.26₇ 3.15₉ 4.20₈ 4.20₈ 0 0 H 4.83₅ 5.36₇ 2.91₈ 11.9₁ 3.88₅ 90.00 4.29_x 3.04_x 3.79_x 3.91_x 11.6_x 9.66 8.56 17.18 25- 18 33- 39 48- 661 9.90 AIPO4*2H2O K_{0.60}Na_{0.90}*0.5(C₄H₁₂N)O*Al₂O₃*10.4SiO₂*13.4H₂O 1003iO₂*0.35Na₂O*0.085Al₂O₃*5.9C₆H₁₉N Variscite 9.82 9.62 7.59 120.00 *100 Variscit ZSM-34 18.20 18.20 ŏ 43. 531 90.00 SiO₂ 90.00 ZSM-48 14.24 20.14 8.40 90.00 2SM-48 Na2Al2Si2.72O9.42*4.39H2O 90.00 С 18.98 18.98 18.98 90.00 90.00 2.85 4.23 Zeolite Upsilon ZZ4 Proposed topology Na₂Al₂Si₆, 10_{17.4} × xC₆H₁₇NO₃ × 2H₂O 0.04(C₆H₁₆NO₂)₂O • 0.96Na₂O • Al₂O₃ • 6.7SiO₂ (C₆H₂₆NO₂)₇O • Na₂O • Al₂O₃ • SiO₃ (Na, X, Ca)₈Al₂SiO₂(SO₄)₂Clo₂₈ NaSi₃₃O_{68.5} × 2H₂O 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 120.00 90.00 7.31 7.39 7.30 90.00 6.76₅
3.49₄
3.25₆
8.13₇
3.96₆ 0H000 46- 652 46- 867 46- 868 35- 479 3.17_x 3.17_x 3.50_x 26.81 18.13 18.30 12.85 18.15 26.16 90.00 90.00 90.00 90.00 ECR-1 ECR-1 ECR-1 i 26.30 12.85 11.95 42.22 3.71_x 14.4_x Giuseppettite Si-NCL-1 3.45₈ 4.18₈ 49- 673 i Nn30.42Si250VO500 *xH2O 3.98₇ 3.86₆ 11.4₆ 10.7₅ X H X X 49- 674 52- 142 49- 927 14.4_x 15.9_x 4.37_x 11.2_x 4.209 2.896 4.027 4.336 0 * 0 0 Alesia40204 NacAlesia00124-H2O-C12H20N NacAlesia50194 V-NCL-1 90.00 90,00 120.00 81.58 31.58 7.53 Zcolite SSZ-37 Unknown structure—ZZ9 K₂O-Na₂O-Al₂O₃-BiO₂-H₂O K₂O-Na₂O-Al₂O₃-BiO₂-H₂O K₂O-Na₂O-Al₂O₃-SiO₂-H₂O AlA₂O₄-0.2(C₃H₁₀N₂)-0.4H₂O AlA₅O₄-0.3(C₃H₁₀N₂)-0.2H₂O X X C M 3.91₈ 2.98₇ 3.10₈ 3.067 6.244 4.152 3.875 4.112 43- 48 43- 50 43- 49 42- 102 42- 103 15.9_x 9.36_x 16.0_x 7.73_x 10.3_x AG4 AG6 AGS 90.00 7.72 19.25 7.72 12.01 7.72 10.36 90.00 90.00 90.00 127.58 4.478 AlAsO4-3 ALAsO4-4 5.98 10.60 20.43 94.85 96.88 90.00 90.00 90.00 90.00 8.41s 7.682 4.068 2.787 3.877 3.16₂ 3.30₂ 3.04₄ 3.83₇ 8.38₇ 90.00 90.00 MOXX 18.96 46- 890 47- 789 9.48_x 9.90_x 7.24_x 4.17_x 10.6_x 11.78 AlasO4-5 11000 6.64 ALA#O4-6 ALA#O4-D 41- 563 48- 573 47- 610 AIPO4-23 A1PO4-26 AlPO4 X 7.26_x 3.92_x 12.8_x 6.71_x 6.71_x 4.77s 3.69s 5.67s 47- 611 48- 35 50-1680 11.24 A1PO4-28 00:00 AIPO. 4.91₂ 4.81₃ 5.54₇ 4.29₆ AIPO4 C₂₄H₆₆N₄ • 12AIPO₄ • H₂O C₄₄H_{12.85}Al₂N_{1.15}O_{6.05}P_{1.9} • 0.22H₂O Al₂O₂ • 0.95P₂O₅ AlPO4-73 AlPO4-H4 CAM-1 CFAP-7A CFAP-7B M X X 90.00 104.63 90,00 8.52 82.09 14.24 42-42-6 7 6.92₀ AgO₂*0.95P₂O₃ 1.1CH₃NH₃*Al₂O₃*0.99P₂O₃*0.32SiO₂*1.27H₂O Al₂O₃*0.99P₂O₃*0.32SiO₂ Al₂O₃*0.99P₂O₃*0.32SiO₂ C₂H₁₂O₄·Na₂SO₄-Na₂O-SiO₂-Al₂O₃-CH₃OH 4.29₉ 3.72₄ 3.26₉ 42- 8 41- 113 41- 114 41- 115 48- 161 6.28_x 8.67_x 8.95_x 4.61_x 10.9_x 4.15₉ 8.51₀ 00000 CFAP-7B CFSAPO-1(A) CFSAPO-1(B) CFSAPO-1(C) CT-5 4 42-5.31₀ 4.37_x 3.476 CSiO₂), CaAl₂Si₃O₁₀*6H₂O Nol₁gGo₂Sic₂SO₁₂₈₂*xC₆H₁₈INO₂ (C₆H₂₀N)_{0.2}xA_{1.16}No_{0.27}Al_{0.07}Go_{1.27}Si_{5.37}O_{16.54}*xH₇O "- Al₂CiO_{1.3}" 90.00 90.00 9.72₆ 7.64₂ 3.81₄ 4.41s 2.941 2.92s 9.91 23.27 20.68 30.62 90.00 99.70 90.00 42- 5 46-1405 47- 236 10.2_x 15.2_x 1 * O i i Clathrasil 25.00 Cowlesite 47- 236 51- 168 48- 733 9.11_x 18.1_x 3,35_x ECR-15 ECR-34 EU-12 90.00 90.00 90.00 120.00 10.5₇ 3.55₇ 8.61 14.83 7.78 20.99 20.69 Na2Al2SigO14 4.20 Al₂Si₂₄O₆₁ N_{82,12}Al₂Si₂O_{6,06} Al₁₀₃Si₂₄P₇₃O₃₈₅ • 2.7C₆H₁₆N • xH₂O [(C₂H₇)₄N]_{2x}Fe_{2-x}PO₄ • zH₂O XXXX 6.85₆ 3.03₆ 4.28₉ 3.40_z 12.1_y 9.216 H-Fu1 LZ-200 MCM-1 46- 748 00000 47- 716 46- 645 43- 88 49-1711 4.603 6.576 2.828 6.95_x 9.83_x 42.3_x 2.74 MCM-21 MCM-41 SiO₂ 213 SiO₂ SiO₂ CaAl₂Si₇O₁₀ *3.5H₂O (C₁₀H₁₀Co)₇(Ga₄P₄O₁₂F(OH)₅) C₁₆H₅₀Al₈N₄O₄₀P₁₀*2.5H₂O 41.2_x 41.9_x 7.85_x 9.35_x 17.3_x 24.0₁ 35.9₂ 5.22₂ 20.8₁ 21.6₁ 8.79₈ 6.61₆ XCOTA 49-1712 MCM-41 MCM-48 90.00 100.90 100.90 7.60 17.60 13.22 18.22 90.00 90.00 90.00 100.90 90.00 51-1591 24- 765 51-1422 51-2111 90.00 Metabeulandite 90.00 4.18₉ 8.57₆ C_{18.8}H_{80.4}Al₂NA_{1.4}SO_{10.5}Si₁₀*10.4H₂O NeAlSiQ+NH₂O NeAlSiQ+NH₂O NeAlSiQ+NH₂O₁₀N₂Al₂Si_{1.4}O_{29.7}*1.9(C₄H₁₂N)₇O*4.1H₂O (S₂H₄₀Al₂N)₁NA_{1.2}O_{10.545}Si₃₅*14.5H₂O (Ne₂O)_{1.2}SAl₂O₃(SiO₂)₆₅*xH₂O 3.354 8.19a 4.46a 3.91a 3.38a 4.19g 3.97e 5.60e 6.267 13.49 4.10x 4.03_x 2.83_x 4.05_x 35-1501 No-1 12- 247 47- 595 42- 358 42- 359 Nepheline hydrate III 000 Nu-1 Nu-6(1) X 4.00, Nu-6(2) 90.00 120.00 90.00 90.00 90.00 90.00 CasAl7(SiO4)5(PO4)4(OH)5 • 16.5H2O 2.88_x 6.98_x 3.46_x 4.27_x 3.42_x 5.80₇ 3.48₂ 3.10₂ 1.34₄ 19.8₉ н 6.08₅ 3.07₁ 3.06₂ 7.02 7.02 20.18 13.10 Perhamite Phase N Phase O K_{2.7}Al₂Si_{2.54}O₅Cl_{0.7} • 0.55H₂O K_{2.72}Al₂Br_{0.72}Si_{2.53}O₉ • 0.43H₂O SiO₂ SiO₂ 9.83 9.80 9.83 9.80 90.00 23-1818 90.00 27-1335 6.30₃ 717 Phase X1 90.00 90.00 90.00 19.40 19.40 14.50 31-1234 O SiO₂ (C₆H₁₆N)₂SiO₂ AIPO₄•0.28C₁₀H₆N₂ C_{1.22}H_{3.63}AIN_{0.44}O₄P C₉H₁₆N·Al₂O₂-SiO₂-Na₂O·H₂O 3.15₉ 3.42₄ 4.18₈ 3.41₆ 3.75₇ 15.5_x 4.33_x 3.65_x 17.6_x 3.93_x 3.44₀ 9.72₀ 7.10₈ 8.44₉ 4.93₆ 90.00 90.00 90.00 X 6.60 31-1233 50-1696 47- 409 15.60 16.50 00000 Phase Y RUB-4 SCS-14 SCS-24 SSZ-19 50- 73 47- 765 Zn_{0.2}Al_{0.8}PO₄ K-Na-Al-Si-O-(C₂H₅)₄NOH-C₇H₁₃N H_{9.6}Al₂Si_{53.9}O_{75.6} K_{0.2}Na₂Al₂Si_{7.4}O_{18.9} 11.5, 3.79, 11.4, 15.7, 15.7, 13.4₃ 11.4₅ 3.78₈ 13.22 90.00 120.00 51-1755 47- 407 47- 408 51- 449 52- 280 4.11₄ 9.43₈ 9.46₉ 3.55₈ 13.22 90.00 STA-5 SUZ-2 SUZ-2

90.00 90.00 120.00

36.15. 36.15

7.54

						. 2	Zeolite	Stru	cture	Type N	ame-	—Cod	le		
Į.	Zeolite Name	PDF# (M		Strong eflectio		Cell	Paran b	neters c	. Ce	II Ang β			Chemical Formula	
13,	Secrafanite SiCo-9	47-1741 42- 495	*	3.72 _x 10.8 _x	2.67. 9.72 ₇	3.30 ₆ 3.80 ₅	12.89	12.89	74.21	90.00	90.00	120.00	H X	$\begin{array}{l} (N_0,C_0,K)_0(S_1,A_1)_{12}O_{24}(SO_4,C_1,F)_3\circ_xH_2O\\ C_{36}H_{84}N_3O_2\circ_2UH_2O\circ_{C0}O\circ_8OS_1O_2\circ_xH_2O \end{array}$	
311	Silhydrite Silica X	25-1332 · 34-1382	0	14.6, 3.38,	. 3.42 ₈ 17.7 ₄	3.14 ₄ 4.38 ₄	14.52	18.80	15.94	90.00	90.00	90.00	X .	Si ₂ O ₆ •H ₂ O SiO ₂	
	Sociom Aluminum Silicate Species P	48- 731 44- 103	1.	2.87, 3.18,	8.79 ₉ 7.10 ₈	8.32 ₈	17.55 10.00	17.55 10.00	8.88 10.00	90.00	90.00	90.00	H C	Na _{1.84} Al ₂ Si _{2.84} O _{9.88} Na _{1.4} Al ₂ Si _{3.9} O _{11.5} °H ₂ O	
	Founkite USI-10B	50-1541 42- 298	i	3.71 _r 3.81 _r	3.31 ₈ 3.69 ₈	4.84 ₄ 11.0 ₅	12.84	12,84	32:24	90.00	90,00	120.00	X H	(Na,Ca,KO ₈ (Al ₆ Si ₆ O ₂₄ XSO ₄) ₂ Cl•H ₂ O C ₆ H ₆ N ₂ O ₆ -C ₁₂ H ₂₈ N-B ₂ O ₅ -SiO ₂ -H ₂ O	
Χ.	ÚTD-2 ÚTD-3	52- 108 52- 108	0	14.1 _x 4.05 _x	3.53 ₆ 5.13 ₈	4.60s 3.824	.•						X	(C ₁₂ H ₂₈ N)-Al-Si-P-O-(C ₂₀ H ₂₀ C ₅ OH)-H ₂ O Al ₃ P _{1.6} Si _{0.4} O _{8.2} =0.86[(C ₄ H ₃) ₄ N] ₂ O=0.16C ₂₁	.H∞CoOH•75H-O
	ÚTD-3	52- 107 52- 104	0	4.05 _x 4.25 _x	5.12 ₈ 4.02 ₇	6.57 ₆ 5.28 ₆				•			X	Al ₂ P ₂ Si _{0.4} O _{6.0}	
14	(PTD-8 (PTD-5 (PTD-6	52- 105 52- 108	ŏ	4.17 ₂ 16.5 ₂	4.22 _x 5.07 ₇	13.69							X ·	(C ₂₀ H ₃₀ C ₀ OH)-Al-Si-P-O-H ₂ O H-Al-Si-P-O (C ₁₀ H ₃₀ N)-Al-Si-P-O-(C ₂₀ H ₃₀ C ₀ OH)-H ₂ O	
	Unnamed mesoporous	49- 932.	Ŏ	33.6 _z	29.02	17.51							X	Si114TiO24.8	
	Unnamed zeolite Unnamed zeolite	5- 308 6- 211 10- 9	0	4,27 _x 3.63 _x 3.28 _x	6.68 ₉ 3.35 _x 2.96 ₈	4.88 ₈ 5.59 ₈							X	Liaisi ₄ O ₁₀ •2.5H ₂ O Altri(SiO ₂) ₂	
	Üinamed zeolite Unnamed zeolite Omnamed zeolite	10- 10 10- 11	O	2.48 _x 14.0 _x	3.53 ₇ 3.00 _x	2.747 3.33 ₆ 4.25 ₈		•	•				X X X	K ₂ Al ₂ Si ₃ O ₁₀ •3H ₂ O Ba-Al-Si-O Pb-Al-Si-O	
3	Ujinamed zeolite	10- 12	0	3.15g	3.907	3.417							x	K-No-Al-Si-O	
Œ	Unnamed zeolite Unnamed zeolite	10- 27 10- 28	0	13.2 _x 3.06 _x	3.03 ₂ 3.45 ₉	4.41 ₈ 3.27 ₆	13.20	13.20	. 13.20	90.00	90.00	90.00	X.	BeO-Al ₂ O ₃ -SiO ₂ -BaCl ₂ -H ₂ O K ₂ O-Al ₂ O ₃ -4SiO ₂ -xKBr	
梦	Unnamed zeolite Unnamed zeolite	10- 29 10- 60	0	4.10 ₁ 4.32 ₁	6.50 ₇ 3.35 _x	6.11 ₇ 2.51 ₈							X	BaAl ₂ Si ₆ O ₁₄ *6H ₂ O Rb ₂ Al ₂ Si ₆ O ₁₆ *H ₂ O	
	Unnamed zeolite Unnamed zeolite	11- 188 13- 129	ο.	7.45 _x 4.08 _x	3.09 ₈ 3.96 ₉	2.82 ₈ 9.52 ₈							X	2(KAISiO ₄)*3H ₂ O Na-Ca-Al-SiO ₄ *H ₂ O	
Ý	Unnamed zeolite Unnamed zeolite	15- 179 15- 259	0	9.21 _x 4.23 _x	6.32 _x 7.07 ₆	3.78 ₁ 3.62 ₄							X	CnAl ₂ (SiO ₃) ₄ •6H ₂ O AlPO ₄ •xH ₂ O	•
Ж.	Unnamed reclite	15- 264 15- 267		7.04 _x 6.86 _x	6.28 ₆ 4.25 ₄	4.98 ₈ 6.50 ₈							X X	AIPO₄ AIPO₄•1.67H₂O	
Ž.	Unnamed zeolite Unnamed zeolite	15- 272 15- 275		4.66 ₂ 8.48 ₂	4.08 _x 4.06 ₈	3.47 ₈ 3.75 ₆							X X	AlPO4*xH2O AlPO4*xH2O	
S.	Unnamed zeelite Unnamed zeelite	16- 605 18-1210		3.13 ₁ 4.83 ₂	6.94 ₇ 2.64 ₉	3.07 ₅ 4.16 ₅	9.93 11.80	9.93 11.80	9.67 11.80	00.08 00.08	90.00 90.00	90.00 90.00	T C	K _{6.7} Al _{5.7} Si _{10.8} O ₃₂ •8H ₂ O 1.2Na ₂ O •0.8CaO • Al ₂ O ₂ •2SiO ₂ •H ₂ O	
望	Unnamed zeolito	20- 121 20- 212	٥	7.93 ₂ 8.97 ₂	3.97 ₂ 3.97 ₉	2.97 ₈ 3.90 ₈							X	BaAl ₃ Si ₈ O ₂₀ •H ₂ O C ₂ O•Al ₂ O ₃ •zSiO ₂ •xH ₂ O	
Ť,	Unnamed zeelite	20-1051 20-1157		13.6 _x 19.7 _x	8.43 ₈ 3.43 ₉	6.86 ₅ 3.20 ₅	13.00 7.79	13.00 19.72	13.68 6.91	90.00 90,00	90.00 95.90	90.00	T M	H ₂ Si ₆ O ₁₃ N ₂ Si ₁₁ O _{20,6} (OH) ₄ •3H ₂ O	
è	Unnamed zeolite	20-1193 21- 132		3.97 _x 8.29 _x	8.97 ₈ 4.25 ₆	2.97 ₈ 3.64 ₄	15.20	16.60	7.26	90.00	90.00	90.00	X Ó	SrO+Al ₂ O ₃ +xSiO ₂ +zH ₂ O CaAl ₂ Si ₇ O ₁₈ +1.7H ₂ O	
	Unnamed zeolite	21- 133 23-1314	i	8.80 _x 3.10 _x	3.94s 3.07 ₂	2.95 ₃ 3.47 ₈	13.22 9.81	17.68 9.81	15.54 6.59	90.00 90.00	90.00	90.00	Ŏ	CaAl ₂ Si ₇ O ₁₈ • 2H ₂ O K _{2.48} Al ₂ Si _{2.52} O ₂ I _{0.45} • 0.48H ₂ O	
1	Unnamed zeslite Unnamed zeslita	24- 181 25- 59	i	4.56 _x 16.6 _x	4.54 _e 5.89 _e	4,20 _x 5.41 ₆	13,38 18.66	17.58 18.66	17.36 7.60	90.00 90.00	90.00	90.00 120.00	O H	CaAl ₂ Si ₇ O ₁₈ *5.5H ₂ O Ba _{1,1} Al ₂ Si _{2,5} O _{2,1} *5.1H ₂ O	
	Unnamed zeolite	25- 62 25- 63	0	3.40 _x 3.79 _x	5.60a 3.68 _x	5.20 ₈ 8,22 _x	, .					:	X	BaAl ₂ Si ₂ O ₈ •2.8H ₂ O Ba _{2.2} Al ₂ Si ₂ O ₈ (OH) _{2.4} •2H ₂ O	
	Unnamed zeolite	25- 619 26-1318	•	3.01, 3.00,	6.96s 6.51p	3.08 ₈ 2.86 ₈							X	K2Al28i2.08O6.16 * 3H2O NaPeAl2Si4O13 * 3H2O	
	Unnamed zeolite Unnamed zeolite	27- 606 28-1035	i	3.77 _x 3.24 _x	6.00 ₉	8.17 ₇ 8.74 ₈	7.47 15.60	11.94 15.60	4.91 15.60	90.00	90.00	90.00	0	H ₂ Si ₂ O ₆ Na ₂ Al ₂ Si ₂ O ₂ •2H ₂ O	
	Unnamed zeolite Unnamed zeolite	28-1882 28-1884		3.77 _x 5.34 _x	3.53 _x 5.03 _x	3.74 ₉ 4.98 _x	18.10	16.00	16.00	121.00	131.00	55.00		C ₇₂ H ₉₆ N ₈ O ₂₀ Si ₈ =69H ₂ O Si ₂ O ₅	:
4	Unnamed reolite	80-, 789 31- 578	i	3.17 _x 11.5 _x	3.03 ₂ 4.31 ₈	6.44 ₉ 3.91 ₈	10.01	10.32	8.21	90.00	90.00	90.00		LiAlSiO4+H2O H2Si2O7	
	Unnamed zeolita Unnamed zeolite	31- 579 31- 580		10.0 _x	3.92 ₈ 7.69 ₅	3.81 ₈ 5.67 ₅							X	H ₂ Si ₂ O ₇ H ₂ Si ₂ O ₈	
	Unnamed zeelite Unnamed zeelite	31- 581 81- 582	i	5.48 _x 5.50 _x	4.05s 4.067	3.55 ₅ 3.55 ₇	11.29	9.90	8.38	90.00	103.78	90.00	Ϋ́	H ₂ Si ₂ O ₅ H ₂ Si ₂ O ₅	
Ž.	Unnamed zeelite	31- 583 81- 584	٥	9.65 _x	4.85a 13.2a	3.35 ₇ 7.36 ₆	7.11	7,42	13.20	90.00	94.00	90.00	X M	H ₂ Si ₂ O ₆ • 0.7H ₂ O H ₂ Si ₁₄ O ₂₉ • 5.4H ₂ O	
4	Unhamed zeolite Unhamed zeolite	31- 967 32- 994	*	3.36 _x 18.4 _x	5.48 ₆ 3.41 _x	2.86 ₂ 1.83 ₆	13.43	13.43	13.43	90.00	90.00	90.00		KAISi ₂ O ₅ SiO ₂ •0.04H ₈ O	
	Unhamed zeolite	32- 995 35- 60	8	3.43 _x 3.71 _x	6.60 ₆ 8.50 ₆	1.86 ₅ 5.98 ₆	8.53	8.53	14.16	90.00	90.00	90.00	X T	SiO ₂ •0.2H ₂ O H ₈ Si ₆ O ₂₀	
	Unnamed zeolita Unhamed zeolita	35- 61 35- 62	0	8.89 _x 3.34 _x	4.23 _x 3.09 _x	3.34 _x 6.91 ₈	8.14 13.80	8.38 13.80	13.64 23.44	90.00 90.00	94.00 90.00	90.00 90.00	-	H ₈ Si ₈ O ₂₀ *xH ₂ O H ₄ Si ₈ O ₁₈ *H ₂ O	
	Unnamed zeolite Unnamed zeolite	35- 63 35- 376	0	6.73 _x 19.6 _x	4.74 ₈ 3.42 ₆	3.33 ₈ 3.33 ₃	19.51 19.68	13.98 19.68	21.16 19.68	90.00 90.00	90.00 90.00	90.00 90.00	C	SiO ₂ Na ₂ Al ₂ Si _{15.7} O _{35.4} •8H ₂ O	
9	Unnamed zeolite Unnamed zeolite	37- 212 38- 196	0	3.10 _x 3.84 _x	2.30 ₂ 11.2 ₈	4.55s 10.0s							X X	Al ₂ P ₂ O ₈ •3H ₂ O H-Al ₂ O ₃ -SiO ₂₁	
题	Unnamed zeolite	40- 72 40- 73	i i	3.47 _x 3.45 _x	1.88 ₆ 1.87 ₂	3.92 ₅ 4.46 ₁	7.51 5.16	7.51 5.16	9.21 5.46	90.00 90.00	90.00 90.00	120.00	Н	Li _{0.23} Na _{0.06} Al _{0.29} Si _{0.71} O ₂ Li _x Al _x Si _{1-x} O ₃	
Ę	Unnamed zeolite Unnamed zeolite	40- 168 42- 379	i O	9.92 _x 3.85 _x	$\frac{10.99}{3.827}$	4.19 ₈ 10.2 ₆	18.68	13.51	8.38	90,00	90.00	90.00	X	C ₁₂ H ₂₄ • Al ₂₀ H ₂ O ₈₀ P ₁₈ Si ₂ Na _{2,38} Al ₂ Si _{67,2} O _{118,69}	
V	Unnamed zeolite Unnamed zeolite	42- 380 42- 381	0	10.0 _x 3.85 _x	3.85 ₅ 10.1 ₉	3.83 ₃ 3.82 ₆							X	Li _{1.62} Na _{2.1} Al ₂ Si _{70.7} O _{146.26} Na _{1.80} Ba _{1.3} Al ₂ Si _{34.8} O _{74.85}	
3	Unnamed zeolite Unnamed zeolite Unnamed zeolite	43- 16 43- 41	0	3.87 _x 9.37 _x	11.3 ₈ 6.88 ₅	10.2 ₅ 3.94 ₅							x	Na ₂ Ga ₂ Si ₅₆ O ₁₂₀ B ₂ O ₃ -SiO ₂	
III G	Unnamed zeolite	43- 66 43- 292	0	11.3 _z 4.29 _x	3.87 ₈ 3.88 ₈	10.2 ₅							X	Na ₂ O • 39SiO ₂ (CH ₃) ₄ NO • 0.40Na ₂ O • 43.38SiO ₂ • 9.0H ₂ O	
	Unnamed zeolite Unnamed zeolite	43- 726 43- 727	0	3.48 _x 2.89 _x	3.93 ₆ 2.17 ₉	4.20 ₂ 8.66 ₈	9.05 9.62	9.05 8.67	16.72 14.24	90.00	90.00	120,00 90.00	0	Ga(H ₃ (PO ₄) ₂)•2H ₂ O (C ₆ H ₁₅ NO ₈)-Ga ₂ O ₅ -P ₂ O ₅ -H ₂ O	
1	Unnamed zeolite Unnamed zeolite	43- 728 43-1660	*	8.72 _E	2.90s 6.247	2.18 ₆ 4.41 ₈	9.66 8.83	8.71 8.83	14.33 8.63	90.00 90.00	90.00		С	(C ₀ H ₁₅ NO ₂)-F ₂ O ₃ -P ₂ O ₅ -H ₂ O C ₄ H ₁₇ O ₂₆ Si ₁₂	
1	Unnamed zeolite Unnamed zeolite	44- 703 44- 784	ŏ	4.30 _x 11.6 _z	4.58 ₇ 3.42 ₃	3.95 ₈ 2.89 ₂	22.17	14.95	13.63	90.00	90.00	90.00	х	[(C5H5)2C0]4[Si84A40176] KAJOHPO4*H2O	
it.	Unnamed zeolite Unnamed zeolite Unnamed zeolite	44-1142	0	12.4 _x 9.04 _x	5.33 ₂ 12.3 ₆ 9.45 ₂	8.06 ₂ 3.22 ₈ 5.06 ₁							X X	C2.22H5,7N0.39 * G2S2 C2.4H6,2N0.4 * G2S2 C2.33H6,36N0.60 * S3S2	
	Unnamed reclite	44-1144 44-1145	0	8.47, 9.63,	6.063	3.918						•	x	C1.04H3.12N028*Ga0.25Ge0.76S2	
	Unnamed zeolite Unnamed zeolite	44-1146 44-1147	0	8.43 _x 7.93 _x	4.40 ₃ 3.17 ₆	2.81 ₁ 4.90 ₄				٠			X	C1.44H4.32N0.35 ° C100.11Ge0.25S2 C1.6H4.6N0.4 ° Ge0.77Mn0.23S2 N0.5Tn. a.5ia.42G-0.42H4O	
	Unnamed zeolite	46- 538 47- 357	8	5.20 <u>.</u> 10.9.	4.30 _x 3.51 ₂	3.15 _x 4.31 ₂							X	Na2Sn1.26Si266O7.86*2H2O (K,Na)Al2Si78O159.5*xC5H14CINO	
Ç,	Unnamed replies	47- 395 47- 396	0	3.54 _x 2.98 _x	3.60 ₆ 6.03 ₆	2.52 ₄ 4.82 ₆	•		•				X	BePO ₄ Cl ₄ BePO ₄ Cl ₅	
	Unnamed zeolite Unnamed zeolite	47- 397 47- 696	0	3.06 _x 15.5 _x	6.16 ₉ 3.44 ₆	4.88 ₆ 8.30 ₃							X X X	BePO ₄ Cl ₆ Na _{9.5} Al ₃ P _{0.7} Si ₁₃₅ O ₂₈₃ • 56H ₂ O Na _{9.5} Al ₃ -P _{0.7} Si ₁₃₅ O ₂₈₃ • 56H ₂ O	
35	Unnamed scolite	47- 697	0	13.5,	3.40	3.55e								Na _{0.15} Al _{2.5} P _{0.7} Si ₁₃₅ O ₂₅₂	

						2	eolite.	Stru	cture	Type N	ame-	Coc	le	
•					Strong		Cell	Paran	neters	Ce	ll Angl	es		. Chemical
Zeolite Name	PDF	# C	M	Re	flectio	ns	a	ь	С	α	<u></u>	γ_	Sys.	Formula
Unnamed zeolite Unnamed zeolite Unnamed zeolite Unnamed zeolite Unnamed zeolite	48- 4	51 40 · 96	0000	1.82 _x 6.59 _x 16.3 _x 9.32 _x 4.19 _x	3.43 ₈ 3.00 _x 4.08 ₇ 5.47 ₈ 3.56 _x	3.298 3.86x 4.076 5.255 11.48	9.53	9.53	9.10	97.00	90.00	90.00	X X X X	K _{0.4} Na _{1.6} Al ₂ Si ₄ O ₁₂ *6H ₂ O Na ₂ O-Al ₂ O ₂ -SiO ₂ -H ₂ O Al ₂ PO ₄ SiO ₆ (C ₂ H ₁₀ N ₂ O ₂ -4AlPO ₄ C _{0.44} H _{2.2} N _{0.4} AlPO ₄
Unnamed zeolite Unnamed zeolite Unnamed zeolite Unnamed zeolite Unnamed zeolite Unnamed zeolite	48- 5 48- 6 48-10 49- 9 49- 9	72 28 31	0 * 0 i	3.49 ₂ 2.98 ₃ 3.11 ₄ 32.6 ₂ 7.16 ₃	3.05 ₃ 2.86 ₄ 2.61 ₃ 28.2 ₃ 3.59 ₉	2.85 ₃ 3.84 ₃ 3.27 ₂ 17.1 ₁ 7.28 ₆	9.48 13.67 10.54	8.96 13.81 10.05	9.66 13.85	90.00 100.12 90.00	89.46 102.42 90.00	90.00 62.78 90.00	A X	BePO_Cl ₇ KgBegfPO_qh ₈ + 5.9H ₂ O KAISIQ HAISI ₂₂₉ O_C23 CgH ₁ _Kl ₇ -HgZn ₂ (PO _q) ₃
Unnamed zeolite Unnamed zeolite Unnamed zeolite VSZ-5 ZKU-4	49- 9 50-16 51-15 39- 42- 3	76 23 46	i O Q	7.30 _x 3.10 _x 11.9 _x 3.38 _x 11.6 _x	4.194 7.60 _x 3.21 ₉ 5.51 ₈ 3.78 _x	3.43 ₂ 3.14 ₄ 6.92 ₆ 3.14 ₈ 2.69 ₉	15,15 13.82 18.47	15.94 13.82 18.47	7.50 18.47	90.00 90.00	90.00 90.00 90.00	90.00 120.00 90.00	X H	C ₄ H ₁₂ N+H ₂ Zn(PO ₄) ₅ K ₂ 0 ₂ Zn _{1,22} Alb,P ₂ O _{8,10} *xH ₂ O K ₂ 0 ₃ N _{21,4} Al ₂ Si ₁₄ O ₃₀ *10H ₂ O Al ₂ O ₃ *4.48SiO ₂ *1.38N ₀₂ O*0.24P ₂ O ₆ *5.55H ₂ O N ₈ O·K ₂ O·Al ₂ O-SiO ₂ SiO ₂
ZKU-5 ZSM-25 ZSM-25 ZSM-43 ZSM-43		24 12 77	0000	3.77 _x 3.24 _x 3.25 _x 4.76 _x 4.74 _x	11.5 ₈ 8.06 ₂ 7.04 ₉ 3.22 ₉ 3.20 ₆	2.85 ₈ 7.03 ₉ 3.11 ₈ 7.58 ₆ 3.77 ₆			·				X X X X	Na ₂ -K ₂ O-Al ₂ O ₂ -SiO ₂ Na ₁ -xAl ₂ Sia ₂ O ₂ ar 0.12((C ₂ H ₅) ₄ N) ₂ O •0.37Na ₂ O •Al ₂ O ₂ •8.5SiO ₂ Al ₂ O ₃ •11.Na ₂ O •0.38Ca ₂ O •0.50C ₆ H ₁₅ CiNO •xH ₂ O Al ₂ O ₃ •15.1SiO ₂ •0.03Na ₂ O •0.60Ca ₂ O •0.67C ₆ H ₁₅ CiNO •xH ₂ O
ZSM-43 Zcolite Barrer L, (Sr) Zcolite Beta Zcolite CHNUAP-3 Zcolite CHNUAP-4	44- 6 17- 1 47- 1 49- 9 49- 9	44 83 17	0	4.75 _x 2.55 _x 3.92 _x 8.71 _x 6.89 _x	8.22 ₉ 1.49 _k 11.3 ₂ 3.70 ₃ 4.15 ₅	7.56 ₇ 2.58 ₈ 3.00 ₂ 3.64 ₂ 3.98 ₅					•		X X X X	Ca _{1.3} Al ₂ Si _{9.6} O _{25.2} SrA ₁ Si ₂ O ₁₀ (OH) ₂ Ca _{4.} H _{1.6} N _{0.9} No _{1.9} Fe ₂ Si ₃ yO ₇₈ *2OH ₂ O C ₂ H _{3.N} *Al ₂ O ₃ *P ₂ O ₃ *4OH ₂ O C _{2.6} H _{1.0} N _{2.5} *Al ₂ O ₃ *P ₂ O ₆ *4OH ₂ O
Zeolite Cs-D Zeolite D, (Cs) Zeolite D, (Rb) Zeolite D, (Sr) Zeolite ECR-9	22- 1 39- 1 22- 7 17- 7 48- 6	31 87 57	i O i	3.14 _x 3.02 _x 3.09 _x 3.54 _x 7.61 _x	3.01, 3.149 2.97, 3.48, 10.6,	2.86 _x 2.88 ₆ 2.83 ₈ 9.51 ₈ 3.04 ₉	10.07 18.50 14.12	10.07 21.00 16.14	13.36 7.12 8.65	90.00 90.00 90.00	90.00 90.00 90.00	90.00 90.00 90.00	X	CaASiO.*1.2HzO CaASiO.*HzO RbAISiO.*1.3HzO Sr-Al-Si-O-HzO 0.14Nag-0.98KgO*Al _{0.1} Ga _{1.8} O ₂ *5.04SiO ₂
Zeolite G, (Ba) · Zeolite J, (Ba) Zeolite K, (Ba) Zeolite K-H Zoolite K-I	19-		0	3.95 _x 3.12 _x 3.16 _x 3.25 _x 13.3 _x	16.2 ₆ 11.4 ₈ 10.6 ₆ 3.18 ₉ 11.6 _x	3.08s 4.58s 6.07s 7.14s 2.99s	18.89 10.00 13.41	18.89 14.40 13.41	15.16 14.30 13.20	90.00 90.00 90.00	90.00 90.00 90.00	90.00 90.00 120.00	X X O	BaalsSisOur*H;O BaalsSisOur*H;O BaalsSisOur*H;O KaalsSisOur*H;O KaalsSisOur*H;O
Zeolite K-I Zeolite K-Z Zeolite LZ-276 Zeolite LZ-276 Zeolite LZ-276	22- 7 22- 7 49- 9 49- 9	94 119 120	0	11.8 _x 2.92 _x 4.29 _x 6.84 _x 5.01 _x	13.57 5.337 6.830 9.289 4.296	2.937 3.657 2.919 4.288 3.435	13.51 13.64	13.51 13.64	13.50 16.51	90.00	90.00	120.00	X	KAISiO, *2H3O KAIA;SiO,}OH*3.5H4O Na _{1.48} AI;SiO _{1.8} O
Zeolite MCM-47 Zeolite MCM-48 Zeolite OE Zeolite Phi Zeolite SCS-15	48- 8 50- 5 43- 38- 2 48-10	39 261	0 * 0 0	11.2 _x 33.1 _x 3.77 _x 3.43 _x 9.20 _x	3.50 ₄ 28.6 ₁ 11.5 ₈ 2.92 _x 4.45 ₁	4.37i 17.81 6.65s 9.51s 4.251	81.09	81.09	81.09	90,00	90.00	90.00	X X X	\\\Da_a_0\SiO_2(OHD_a_20*xC_1_4Ha_0N_2\SiO_2\SiO_2\Da_{\text{A}_0}\Da_{A
Zeolite SCS-17 Zeolite SCS-18 Zeolite SCS-19 Zeolite SCS-20 Zeolite SCS-21	48-16 48-16 48-16 48-16	062 063 064	0000	11.2 _x 9.80 _x 12.4 _x 9.80 _x 5.90 _x	9.20 ₈ 3.60 ₈ 6.20 ₁ 4.90 ₈ 6.70 ₈	12.24 4.474 14.9 ₁ 3.26 ₄ 4.70 ₆			•			;	X X X X	C113H3.36Ala5N6.26O2Pas CacH1.57Ala5Na:203Pas CacH2.26Ala5N0:802Pas Ca73H2.16Ala5N0:36O3Pas C6.4H1.2Alo5N0:202Pas
Zeolite SSZ-28 Zeolite SSZ-28 Zeolite ULM-5	49- 9 49- 9 49- 9	916	0	5.16 _x 13.2 _x 14.7 _x	3.39 ₇ 11.1 ₇ 12.8 ₈	5.73 ₇ 5.66 ₆ 7.24 ₂	10.25	18.41	24.64	90.00	90.00	90.00	. X X O O	K ₂ O-Al ₂ O ₃ -SiO ₂ K ₂ O-Al ₂ O ₃ -SiO ₃ C ₃₄ H ₉₆ •N ₂ Ga ₁₆ (PO ₄) ₁₆ (OH) ₂ F ₇ •EH ₂ O

4.		_	•				•	
Zeolite Name	PDF#	Structure Type Code	Zeolite Name	PDF#	Structure Type Code	Zeolite Name	PDF#	Structure
ABW,(Li)	46- 631	ABW	Beryllophosphate-G	46- 293	GIS I	ECR-84	51- 168	Type Code
ACP-1 AG4	49- 624 43- 48	ACO ZZ9	Beryllophosphote-H Beryllophosphate-P	46- 298 46- 295	BPH ANA	ECR-6 EMT (Na)	47- 235	CAN
AG6	43- 50 49	· 2Z9 2Z9	Beryllophosphate-R Bikitalte	46- 292 14- 168	RHO BIK	EU-12	46- 566 48- 733	EMT.
AGS AMS-1B	43- 45	MOFI	Boggsite	42-1379	BOG	EU-19 Edingtonite	46- 567 25- 60	,221
MAMS-1B	42- 383 43- 37 ·	MFI MFI	Brewsterite Bystrite	41-1356 45-1378	BRE	Edingtonite, (K,C))	45- 123	EDI .
AMS-1Cr AMS-1Cr	47- 766	· MFI	CAM-1	50-1680	1.0S 2Z9	Edingtonite, (Li) Epistilbite	27-1212 39-1281	EDI
AMS-1Cr	47- 787 46-1264	MFI AFG	CAPSO-34 CF-3	47- 701 39- 155	CHA MTN	Brionite	39-1379	ERI
Alghanite AlAsO4-3	42- 102	729	CFAP-7A	42- 6	229	Ethylene glycol sodalite Faujasite	49-1063 12- 229	SOD FAU
(*; AlAs04-4 (*; AlAs04-5	42- 103 46- 890	ZZ9 ZZ9	CFAP-7B CFAP-7B	42- 7 42- 8	229 229	Faujasite Faujasite	12- 246 28-1034	FAU FAU
A1AsO4-6	47: 789	229	CFSAPO-1(A)	41- 113	229	Paujasita	39-1380	FAU
AlAsO4-D AlPO-21 (Pyrrolidine)	41- 563 45- 184	ZZ9 AWO	CFSAPO-1(B) CFSAPO-1(C)	41- 114 41- 115	279 779	Ferrierite Perrierite, (Ga)	. 39-1382 46- 80	FER FER
AIPO4-5 AIPO4-5	89- 216 4071	API AFI	CIT-1 CIT-1	50-1694 50-1703	CON	Perrimordenite Pranzinite	48- 513 30-1170	MOR FRA
AIPO4-5	41- 44	AFI .	CIT-1	52- 110	CON	GaP04-21	45- 180	AWO
AIPO4-5 E-AIPO4-6	41- 557 44- 44	AFI	CIT-5 CS2-1	51-1382 47- 722	CFI EMT .	GaPO4-M1 GaPO4-M2	51- 240 61- 241	221 221
AIPO4-5 AIPO4-8	48-1080 43- 561	AFI AET	CSZ-1 CSZ-1	47- 722 47- 723	PAU EMT	Garronite Garronite	39-1374 51-1499	GIS GIS
AIPO4-8	46- 551	AET	CSZ-1	47- 723	FAU	Genthelvite	38- 467	SOD
A1P04-8 A1P04-9	47- 245 43- 562	AET ZZ1	CT-5 CZH-5	48- 161 47- 721	ZZ9 MTW	Gismondine Gismondine	20- 452 39-1373	GIS GIS
(A)PO4-11	41- 556 43- 563	AEL AEL	Ca-Tetranatrolite Calcined ITQ-3	42-1381 49- 623	NAT ITE	Gismondine (dehydrated) Giusoppettita	46- 341 35- 479	GIS
AlPO4-11	47- 599	AEL	Calcined ITQ-4	49- 619	IFR	Gmelinite	38- 43 5	ZZ4 GMB
AIPO4-12 AIPO4-12-TAMU	43- 564 41- 565	ATT ATT	Cancrinite Cancrinite	34- 176 46-1332	CAN CAN .	Gobbinsite Gonnardite	35- 559 10- 473	GIS NAT
AIPO4-14	48- 565	AFN	Cancrinite (Cs,Li,Ti)	48- 520	CAN	Gonnardite	42-1380	NAT
AIP04-14 AIP04-14	46- 630 46- 751	apn apn	Cancrínite, (Li,Ca) Cancrínite, (Li,Ca)	45- 124 47- 252	CAN CAN	Gonnardite Goosecreekite	45-1324 35- 469	NAT GOO
FAIPO4-14 FAIPO4-14A FAIPO4-15 WAIPO4-16	47- 503 47- 325	AFN ZZ1	Cancrinite, (LI,TI) Cesium silicotitanate	47- 253 50- 58	CAN ZZ1	Gottardiite Gottardiite	49-1814 49-1831	NES NES
AIP04-15	45- 183	ZZ1	Chabazite	34- 187	CHA	H-Ful	45- 748	ZZ9
AIPO4-16 AIPO4-16	41- 564 43- 566	Tea Tea	Chabazite Chabazite (AI)	52- 784 44- 248	CHA CHA	H-Nul Harmotome	46- 747 39-1377	RUT PHI
AIP04-17	41- 574	ERI	Chabazite, (Ba)	43- 137	CHA.	Harmotome, (Na)	12- 687	PHI
TAIP04-17 TAIP04-17	43- 567 47- 608	eri Eri	Chabazite, (Co,P) Chabazite, (Ca)	45- 119 44- 45	CHA.	Начуре Начуре	37- 473 50-1644	SOD
AlPO4-1B FAIPO4-1B	43- 568 45- 117	AEI AEI	Chabazite, (Cs) Chabazite, (K)	44- 48 12- 194	CHA CHA	Hauyne-Pb Heulandite	29-1221 41-1357	SOD Heu
AIPO4-18	45- 118	AEI	Chabazite, (Sr)	45-1427	CHA	Heulandite-Sr	24- 469	HBU
AIPO4-18 AIPO4-20	47- 608 43- 669	AEI SOD	Chabasite-Na Chiavennite	19-1178 85- 602	CHA .	Hydrogen Nu-3 Hydroxysodalite .	46- 750 11- 401	LEV SOD
AIPO4-20 AIPO4-20	45- 509 50-1697	SOD	Chiral Zincophosphate Clathrasil	49 621 38-1823	CZP NON	ISI-4 ITQ-3	43- 15 51-1381	MTT
AIPO4-20 (Sodahte)	47- 597	SOD	Clathrasil	42- 5	2 29	1794 179-7	51-1380	IFR
AIPO4-21 AIPO4-21	48- 571 45- 179	AWO AWO	Clinoptilolite Clinoptilolite, (Na)	89-1883 47-1870	HEU HEU	17Q-7 17Q-9	51-1379 51-1878	isv Stf
MAIPO4-21	45- 455 41- 567	AWO AWW	Clinoptilolite-(Ce) Cloverite	44-1398 46- 558	HEU	Kenyaite, (H) Kenyaite, (H)	37- 385 37- 386	Z21 ZZ1
AlP04-22	48- 570	AWW	Cloverite	50-1705	CTO	Kryptofix 222-AIPO4	51- '76	LTA
MAJPO4-22	45- 456 47- 598	AWW AWW	CoAPO CoAPO-20	52- 161 50-1701	PAU SOD	Kryptofix 222-AlPO4 LZ-200	51- 77 47- 716	LTA ZZ9
A)P04-22 A)P04-23	43- 573	229	CoAPO-34 CoAPO-34	50-1479 50-1480	CHA CHA	Laumontite Laumontite	26-1047 46-1325	LAU
AIPO4-25 AIPO4-25	41- 566 43- 572	ATV ATV	CoAPO-34	50-1480 50-1481	CHA	Laumontite	46-1325 17- 749	SOD
Apo4-25 Apo4-28 Apo4-28 Apo4-31 Apo4-51	47- 610 47- 611	7Z9 7Z9	CoAPO-43 CoAPO-44	52-1510 46- 839	GIS CHA	Lazurite Lazurite	41-1392 41-1393	SOD SOD
AIP04-31	49- 574	ATO	CoAPO-5	50- 612	AFI	Lazurite	42-1312	SOD
Elmor on	45- 177 47- 711	ATO ATT	CoAPO-50 CoAPSO-44	41- 559 46- 340	AFY CHA	Leucite Leucite	38-1423 52- 129	ana ana
APO4-33 APO4-34 APO4-34	47- 712	ATT	CoAPSO-47	46- 342	CHA CGF	Levyns	26-1381	LEV
AIPO4-34	47- 166 47- 167	CHA CHA	Cobalt-Gallium-Phosphate-5 Cobalt-Gallium-Phosphate-6	49- 618 49- 622	cgs ·	Levyne Levyne	46-1263 51- 51	LEV
200	47- 168 47- 184	CHA CHA	Cowlesite	46-1405 50-1700	ZZ9 SOD	Levyne Linde A	51- 52 11- 589	LEV LTA
AIP06-36 AIP06-40 AIP06-41	47- 184 62- 162	AFR	CuAPO-20 DPZ-1A	50-1700 47- 249	FAU	Linde A, (Li)	14- 298	LTA ·
AIP04-41 AIP04-41	46- 556 62- 211	AFO AFO	DPZ-1B DPZ-2A	47- 250 48- 516	PAU RHO	Linde B1 Linde B2	38- 327 38- 328	GIS. GIS
AIPO4-52	46- 338	AFT AFT	DPZ-2B	47- 248	RHO ABW	Linde B3 Linde B7	38- 329 38- 330	GIS GIS
AIPO4-52 AIPO4-52 AIPO4-52 AIPO4-52, calcined,	46- 697 46- 698	APT	DPZ-40 DPZ-4A	52-1408 48- 517	ABW	Linde L	22- 773	LTL
AIPO4-52, calcined, partially rehydrated AIPO4-54	50-1702	AFT	DPZ-4B DPZ-4C	48- 518 48- 519	ABW ABW	Lindo L Liottite	89- 224 47-1742	LTL Lio
AIPO4-54 NAIPO4-C	42- 28 41- 560	VFI APC	DPZ-4D	47- 251	ABW	Lithium Zinc Phosphate Hydrate	52-1483	ABW
AIPO4-C	41- 561	APC	DPZ-7A DPZ-7B	47- 248 47- 247	SOD	Losod	31-1269	Los
AIPO4-C ZAIPO4-D	45- 457 41- 562	APC APD	Dachiardite Dachiardite, (Na)	18- 467 30-1149	DAC DAC	Losod, (Na) Lovdarite	39- 221 25-1302	LOS
AIP04-H1 2AIP04-H2	48- 33 . 46- 557	VPI AHT	Danalite	11- 491	SOD	Lovdarite MAPO-39	39-1367 46- 681	LOV
AIPO4-H3	48- 34	APC	Davyne Deca-dodecasil-SR	50-1578 38- 651	CAN DDR	MAPO-39	50-1704	ATN
AlPO4-H4 Aluminosilicate, (Cs)	48- 35 41- 569	229 CAS	Deca-dodecasil-3R Dodecasil-1H	41- 571 41- 572	DDR DOH	MAPO-41 MAPO-43	46- 682 42- 19	AFO G18
Amicite	33-1273 40- 474	GIS ANA	Dodecasil-3C	39- 227	MTN	MAPO36. MAPSO-35, calcined	46- 559 52-1177	ATS ATS
Ammonialeucite	61-1539	ANA	Dodecasil-3C EAB	45- 284 41- 573	.MTN EAB	MAPSO-46	41- 558	APS .
Ammonialeucite, (Ti) Analcime (Analcime	19-1180 41-1478	ANA ANA	ECR-1	46- 652 46- 867	72A 724	MCM-1 MCM-21	46- 645 43- 88	ZZ9 ZZ9
Raynakima, (Us.Ga)	45- 181	ANA	ECR-1 ECR-1	46-868	ZZ4	MCM-22 MCM-41	48- 75	MWW
Analcime, (Cs.Ga)	45- 182 44- 32	ANA ANA	ECR-1 ECR-1	47- 288 47- 288	MAZ MOR	MCM-41	49-1711 49-1712	7Z9 2Z9
Consiste (Mg)	42-1378	ANA	ECR-10	46- 539 47- 236	RHO	MCM-48 MCM-58	51-1591 52- 113	ZZ9 IFR
Analcime, (NH4) Analcime, (NH4)	14- 19 45- 515	ANA ANA	ECR-15 ECR-18	47- 254	PAU	MCM-9	42- 427	VFI
Analtime, (P) Analtime, (Rb,Mg)	43- 136 43-1499	ANA ANA	ECR-2 ECR-26	39- 294 50-1692	LTL GMB	MCM-9 Magadiite	46- 646 42-1850	VFI ZZ1
ar Barrerite	43-1489 29-1185	STI	ECR-26	50-1693	GMB .	Magadiite, (H)	29- 668	ZZ1 .
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